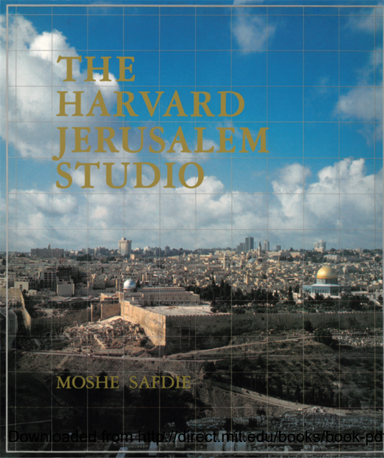
# THE HARVARD JERUSALEM STUDIO



MOSHE SAFDIE

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## URBAN DESIGNS FOR THE HOLY CITY

with a new preface by the author

MOSHE SAFDIE

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# PREFACE

*The Harvard Jerusalem Studio* consisted of a series of interdisciplinary design studios that took place at the Harvard Graduate School of Design between 1980 and 1984. The idea was to initiate a series of studios, which included students of architecture, urban design, city and regional planning, and landscape architecture, addressing the most urgent issues that faced the rapidly changing and growing city of Jerusalem. It was the outcome of my own deep involvement with the city during those years. Having come to Harvard in 1978 to head the Urban Design program, I felt that Jerusalem would be an excellent pedagogic vehicle in which the students, of all the GSD departments, could engage on every facet—from detailed design to urban policy—that affected the city.

To facilitate this, it was clear that special budgets would be needed to allow the students to travel to Jerusalem, study the city, and meet many of the responsible professionals and political and business leaders engaged in the city. Toward that end, I succeeded in obtaining a grant from the New York philanthropist Irving Schneider, whose daughter, Lynn, was studying architecture at the GSD, as Jerusalem was dear to his heart. I managed to get his support with help from the mayor of Jerusalem at the time, the incomparable Teddy Kollek.

The idea that a grant would enable Harvard students and faculty to engage in the City of Jerusalem raised legal issues for the University. *"Would this be construed as Harvard University providing design services? Is this an appropriate engagement?"*

What I came to realize, later on, was that this was the first of many so-called "sponsored studios," now totally commonplace in the Graduate School of Design. Since this was the first overseas engagement sponsored by outside funds, the University legal counsel had to review the proposal, which they eventually approved.

Over the next five years, some 150 students and 75 advisors participated in a series of studios. We addressed sensitive areas within the Old City, as well as the urban design of areas in the New City surrounding the Old City, informing the transition between the old and the new. Other landscape and urban design studios addressed issues of the entries to the city, the urbanization edge on both the forested and desert borders of the city, and landscape policy.

At the conclusion of the program, with the help of Uri Shetrit and L. Rudolph Barton, who acted as editors, the work was collected, reviewed, and published as *The Harvard Jerusalem Studio*. It is a testimony to the creative energy, which was amplified by the magic of Jerusalem, that yielded significant projects, some of which had much influence on events in the city in later years. Project participants met with many design professionals and civic figures in Jerusalem, some of whom traveled in reverse to participate in the reviews of the student's work at Harvard.

The publication of the book, once again, raised the concern of the Harvard University legal counsel. Could the book be titled *The Harvard Jerusalem Studio*? Was that an appropriate place for the University to have its name associated? After some deliberation, the book's title was approved. I was personally delighted to have MIT Press publish the book. MIT was the publisher of my first book, *Beyond Habitat*, in 1970. It gives us great pleasure to have this available again thanks to the MIT Press Humanities Open Book Program.

—Moshe Safdie, December 2018

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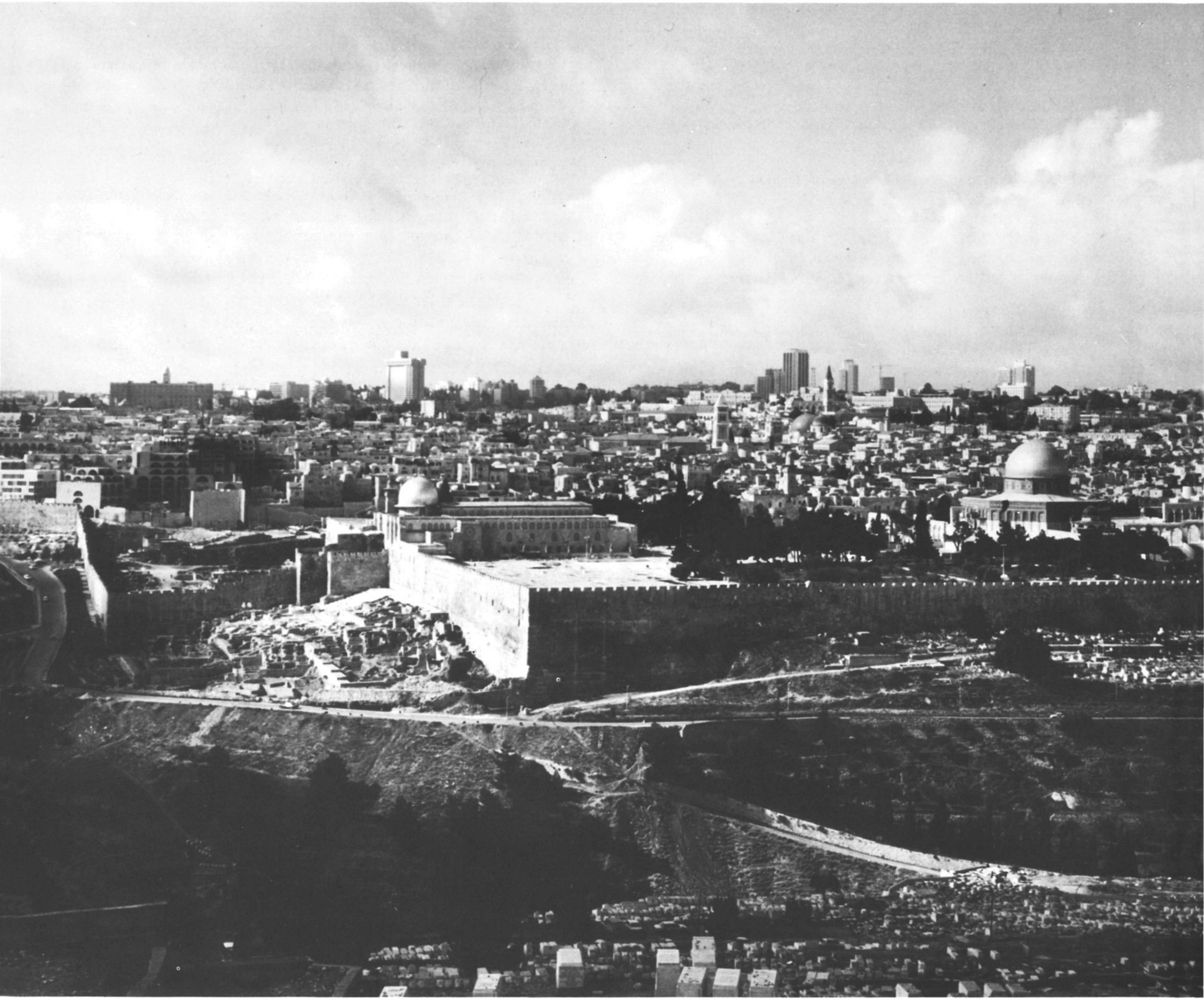

# INTRODUCTION

Seemingly unrelated events can sometimes coincide to give birth to an important undertaking. Such was the case with the Jerusalem studios in the Harvard Graduate School of Design. Developments in the field of urban design education, an urgent need to focus on some of the planning and urban design strategies in Jerusalem, and the emergence of a sponsor who saw the value in connecting the one to the other gave birth to a program in which 150 students and 11 faculty members devoted five years to the study of Jerusalem.

Jerusalem, a sleepy and provincial divided city in the 1950s, burst into a period of intense development after its unification in 1967 following the Six Day War, making it one of the most fascinating laboratories of urban development. All the ingredients were there: a historic city of world significance; a religious and sacred center for three of the world's religions, and a city supercharged with symbolic meanings; a complex physical setting of steep hills, valleys, and plateaus on the watershed between desert (aridity) and fertility; a diverse mix of people of different religions, races, incomes, cultures, and life-styles; a city growing at the rate of 3.7 percent per year, with a population of 268,000 in 1967 heading toward 775,000 by the turn of the century.

Although the conditions found in Jerusalem are not necessarily unique (there are scores of historic cities undergoing similar growth and confronting similar issues), development in Jerusalem was taking place in the public eye, under the continuous scrutiny of the world's lay and professional communities. It was examined and reexamined by committees of architects and planners, agencies of the United Nations, committees formed by church groups, representatives of the religious hierarchies, not to mention various political factions connected to the fate of the city. And in all this there was a common theme: Jerusalem was a city with a heritage that must be preserved and protected. The forces of contemporary growth that were accepted and taken for granted everywhere else were under attack in Jerusalem.

The need for attention to and study of urban design issues in Jerusalem was highlighted by a series of meetings of leading architects, planners, and other eminent individuals who had been brought together under the auspices of the Jerusalem Committee, a body set up by the mayor of Jerusalem, Teddy Kollek, to examine the city's actions in shaping future growth. Unification of the city in 1967 found each of the two sectors unprepared in their planning for the situation of a single city now subjected to intensive development. As a result, a new master plan was initiated in 1968. Like many plans of its time, it focused primarily on the growing transportation needs of a city whose numbers of cars expanded exponentially with population growth. Projections suggested a quadrupling of cars by 1985.

In 1970 the master plan was brought to the Jerusalem Committee for the first formal review of planning and urban design intentions. The reaction of the committee is a matter of record, but suffice it to say that the plan drew responses of outrage and deep concern. Simply stated, the 1970 plan aroused the committee's concern because it had been generated primarily by transportation engineers who translated traffic demand into a network of expressways and arterial roads, forming a super-grid that was applied arbitrarily and insensitively to the city fabric and terrain. Thus it proposed to surround the Old City with expressways, fill valleys with cloverleafs, tunnel under the Old City and plow through historic neighborhoods, and level mountainsides. In retrospect, it is now clear that even if the plan had been adopted, the city probably would not have had the resources to implement it. But the significance of that moment was that a group of experienced architects and planners, made wise by the errors and

**0.1** *The Old City of Jerusalem viewed across the Kidron Valley from the Mount of Olives. Domes and spires contrast sharply with the modern development marking the new city's skyline.*

tragedies of such transportation planning in their home countries, came to see the danger of applying these methods to Jerusalem. Their reaction and the subsequent replanning that ensued set a precedent, and thereafter each step of planning by the municipality and the central government was the subject of careful scrutiny. The details of this development will be discussed later, but the reviews of planning actions that followed in 1972, 1974, and 1978 identified numerous areas that required further study. There was concern that these areas were being neglected because of limited resources and manpower.

My own involvement in Jerusalem was as a practicing architect and urban designer and as a member of the Jerusalem Committee. By 1978, when I was appointed Director of Urban Design at Harvard, I was becoming alarmed by the lack of attention given to the many areas in Jerusalem that would come under development pressure in the 1980s.

Most of the concern in development strategies was directed to the preservation and restoration of the Old City and its immediate surroundings. The Jewish quarter, partially destroyed in the War of Independence of 1948, had been the subject of massive renovation and restoration after 1967. A master plan had been developed by Arieh Sharon and David Anatol Brutzkus for the Old City and its environs. A massive landscaping program was aimed at surrounding the Old City walls with parks and expanding the city park system into the two great historic valleys of Hinnom and Kidron. The Ministry of Housing all but took over the planning and building of several satellite cities located primarily for political and strategic reasons, which compounded the problem of orderly growth and efficient communications. Mamilla, the no-man's-land around Jaffa Gate, the Western Wall precinct in the heart of the Old City, the Jewish quarter, and the new neighborhoods at the outskirts were all the subjects of intensive urban design activity. Meanwhile, other areas equally crucial to the city's future growth and image lay unattended: for example, the no-man's-land by Damascus Gate connecting various city neighborhoods, the northern approach road to the city, and ritual routes to the Old City around St. Stephen's Gate and the Mount of Olives. Unplanned sprawl was permanently changing the image of the city, with little regard for the consequences: strip development along Ramallah Road and the road to Bethlehem was obscuring the clear edge of the city. Without control, Bethlehem and Ramallah would be swallowed by Jerusalem, and the city's unique setting in the landscape would be irreversibly changed.

In its 1978 meeting the Jerusalem Committee urged that the city expand its planning capabilities and develop strategies to cope with these developments. As an informed observer, I was convinced there was little likelihood that the city could respond. The city's limited resources, severe shortage of skilled professionals, and financial inability to compete with the private sector for those individuals combined with the complex political relations between the city and the central government and between communities within the city to render a positive response to the Jerusalem Committee's recommendations unlikely. It was at that moment that I began to consider that an academically sponsored undertaking might bring to Jerusalem fresh talent while at the same time acting as a catalyst for Harvard's urban design program.

Urban design, both as a term and as an academic program, was in fact invented at Harvard by the late José Luis Sert in 1961. The postgraduate program emerged to fill a vacuum created by changes in the field of city planning and was a positive response to the concern for city and neighborhood design, with all its socioeconomic repercussions, which was a priority on the agenda of the architectural avant-garde in the 1960s. Sert's frustration with city planning was brought about by changes occurring in the field throughout the country. Traditional city planning had dealt with land use, land development, and transportation. The "new" city planning was preoccupied with policy and the impact of policy on the well-being of the

0.2 *The Van Leer Three-Dimensional Map of the Old City of Jerusalem.*

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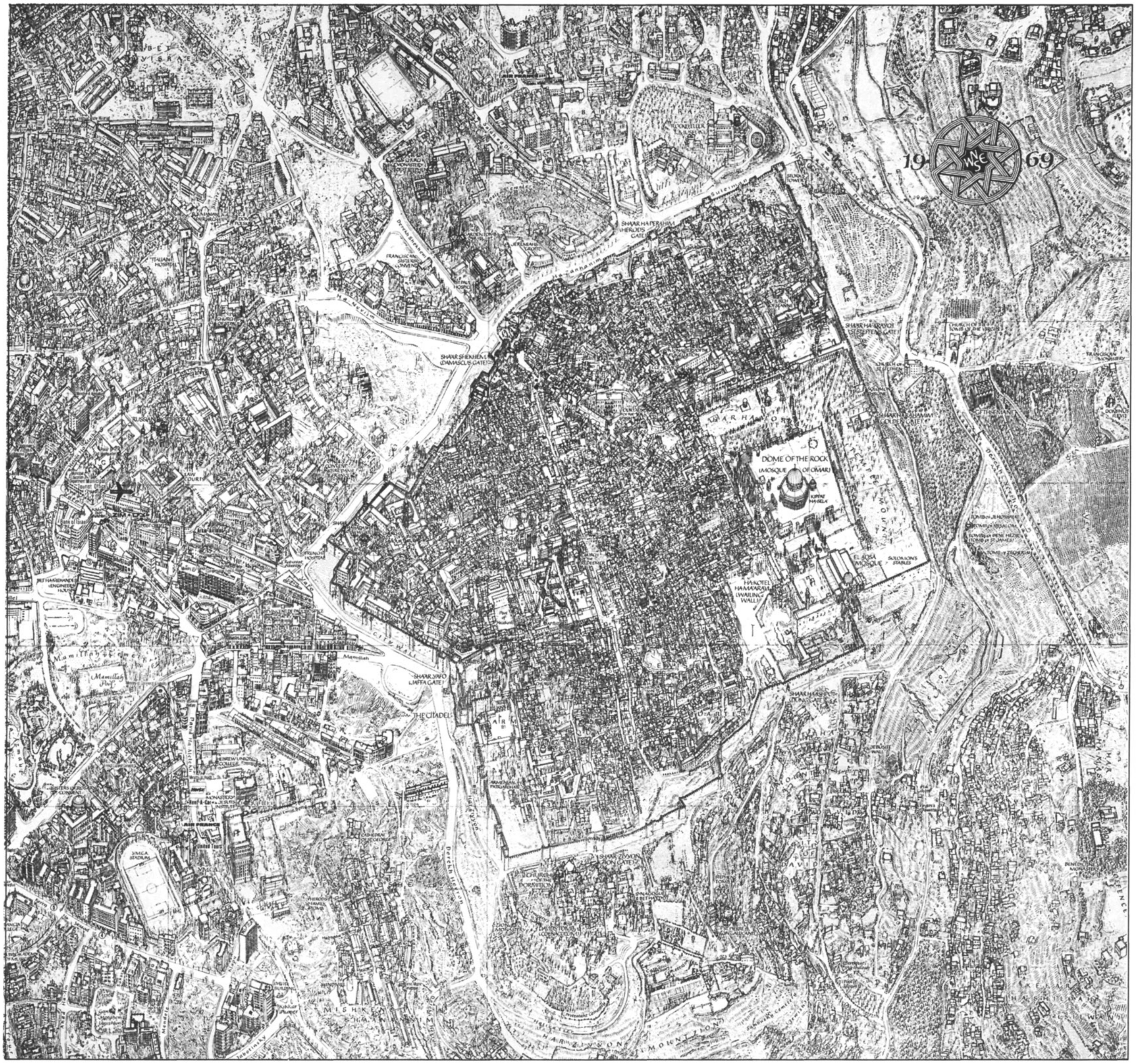
19
69
SHAAR SHEKHEM (DAMASCUS GATE)
SHAAR YAFO (JAFFA GATE)
THE CITADEL
CITY WALL
DOME OF THE ROCK
(MOSQUE OF OMAR)
EL AQSA MOSQUE
SOLOMON'S STABLES
HAKOTEL HAMAARAVI (WAILING WALL)
SHAAR HARAHAMIM (GOLDEN GATE)
CHURCH OF ST. STEPHEN
HAR HABAYIT
TEMPLE MOUNT
ARMENIAN PATRIARCHATE
YMCA STADIUM
HAR ZIYYON (MOUNT ZION)

citizenry. Thus analytical methods, statistics, and various forms of economic modeling as determinants of policy became the primary focus. Though effective in their own way, the new planners felt uncomfortable with the three-dimensional world of city design. In time the profession attracted individuals with highly developed analytical skills who were not at ease in the world of visual and aesthetic determinants for the manipulation of space, land, and their organization and for the articulation of diverse urban uses.

Sert had sensed the drift at the Graduate School of Design and elsewhere and counteracted by creating the Urban Design Program in 1964, with Wilhelm Von Moltke as its director. Architects and landscape architects enrolled in the program found themselves primarily concerned with the design of new communities and housing. These were initially treated as large-scale architecture projects — albeit with an infusion of socioeconomic concerns — conceived as if they would be realized by a single entity in a fixed period of time. Perhaps most representative of the concerns and priorities of this period was the ambitious undertaking of the plan for the new city of Cuidad Guyana, Venezuela. The planning team attracted both Harvard and MIT faculty under the auspices of the Joint Center for Urban Studies, headed by Wilhelm Von Moltke, and attempted in a three-year period to develop the plans for a brand new city in a resource-rich sector of Venezuela.

By the late 1970s much changed in the Harvard Urban Design Program and in similar programs that had sprung up across the country. The large-scale, bold undertakings for new cities and neighborhoods, the great interventions, had been discredited or were at least disappointing. The Federal New Cities Program had been a disaster, and the ambitious HUD-sponsored Breakthrough Program, which assumed that contemporary technology would help solve housing needs, did not yield the expected results.

The focus of urban design had therefore been directed to the dilapidated American city centers. Activity and interest in the university very often reflect the interests in the outside world; it is the exception when the professional schools transcend such interests and chart their own priorities. With billions being spent on urban renewal in one of the most ambitious face-lifting efforts in history and with the interstate highway program plowing arteries through every major American city, often with unexpected and sometimes alarming consequences, it was natural that the Urban Design Program should focus on the repair of existing cities.

A new kind of urban design emerged in New York and Boston, which other cities subsequently adopted. Under Mayor John Lindsay, a team of young and energetic architects and urban designers charted ambitious plans for mid-Manhattan and the financial district. New techniques were explored: urban design guidelines, qualitative codes, and incentive zoning (an elaborate bonus system) attempted to create continuity and connection between the diverse parts constructed by individual developers. In Boston, Ed Logue, with the powerful support of the city administration, launched the downtown's renewal with the construction of Government Center and the redevelopment of the waterfront. Whole sections such as the West End were cleared and totally rebuilt.

In the university, projects like these were chosen as studios in which faculty and students explored alternative methods for a "quick fix." The thrust of the inquiry was expressed in the title of the central studio offered by the Urban Design Program, "Revitalizing Downtown." Though much of this activity was carried out by developers from the private sector, the financial incentives were supplied primarily by the federal government. A great deal of interest was demonstrated in implementation methods, real estate finance, zoning, and urban legislative techniques, which were the necessary ingredients for mastering the revitalization process.

**0.3** *The roofscape of the Old and the New city quarters contrasts with the open landscape of the western slopes of the Mount of Olives and the arid Judean desert in the far distance.*

On assuming the directorship of the program in 1978, I felt that revitalizing downtown was but one segment of a much broader agenda of urban design concerns that would be faced in the 1980s. With the faculty I embarked on an examination of what these concerns would be and how the program might be restructured to make them part of both the education of urban designers and a broader academic inquiry into the subject. We felt a sense of urgency, because of the range of subjects that had been neglected during the years of concern with revitalizing downtown areas. The most obvious problem was that the students had not participated in studios that dealt with virgin land — that is, a tabula rasa in which a new urban fabric was to be constructed and in which public space, diverse land uses, transportation systems, and infrastructure were to be given form and become the framework for development. It was not as if this type of development were not occurring throughout the country; most metropolitan regions were primarily growing in the suburbs, which meant the development of virgin land. And even though this development of housing, shopping centers, offices, and industrial parks was consuming millions of acres of land annually, it was not the subject of study in the design schools. Even within city centers, opportunities for large-scale development on virgin land emerged. Cleared land on waterfronts and neighborhoods demolished in the 1950s were awaiting redevelopment, as were large parcels of land held by the military or others yielding to the pressure for development in the boom years of the late 1970s. Surely these were worthy subjects for design exploration.

The omission seemed to be even more glaring when one considered urban development outside the United States. In the developing countries, cities were doubling and quadrupling their population in a matter of a decade. Mexico City grew from 4.5 million people in 1960 to 10 million in 1980; Hong Kong from 3 to 5.3 million; Sao Paulo from 3.8 to 7 million; and Cairo from 3.3 to 9 million. Major undertakings of urban construction were occurring mostly in unguided and unplanned circumstances. With more than 50 percent of the urban design students at Harvard coming from outside the United States and most of those from developing countries, it was urgent to expand the curriculum to include the study of this type of urban growth.

The presence of foreign students and their interest in urban development in other countries meant that the question of cultural context and relevance had to be addressed. The students were not going to learn about the problem of fitting urban forms and life-styles into cultural context from a studio dealing with the pedestrianization of Boston's downtown streets. Nor would the exploration of the more subtle and complex world of symbols, ritual, and social mores be likely to emerge in policies accompanying land use plans for American downtown areas.

It is important to note that these issues were related to general developments in architectural thought. Several decades of CIAM, the International Style, had come to a head, and the theories of the Modern movement were being challenged. If the Modern movement had neglected to consider the public need for icons, decoration, and embellishment, and even for nostalgic associations, that deprivation was much more severe for the non-Western countries. The very term "International Style" denied the uniqueness or specialness of other cultures, other life-styles, other economic and technological circumstances. The entire postwar era became a demonstration in insensitivity as American and European architects planted the developing world with cities and neighborhoods that could be said, at best, to be the importation of irrelevant, unrelated concepts. Buildings and public spaces were organized in a manner totally unrelated to either life-style or traditions of the host countries. These gestures were not limited to the colonial-style interventions of Western architects but often were

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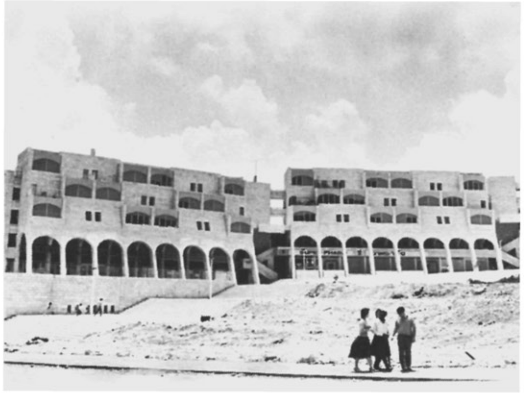

**0.5**

**0.6**

**0.4** *A new housing project at Gilo, south of Jerusalem. Every old city has new developments far different from anything that existed earlier. To what extent should these developments reflect the values of traditional design?*

**0.5** *On a regional field trip, students are introduced to Jerusalem by Israel Kimhi, chief policy planner for the municipality.*

**0.6** *Adnam Husseini (center), chief engineer for Al Waqf, discusses Islamic architecture with students on a walking tour of the Haram es Sharif.*

0.7 *In the foreground are the wall and the Kidron Valley; the dark dome in the center marks the Holy Sepulchre compound. The roofscape of the Old City reflects the mosaic that is Jerusalem. The rich juxtaposition of religious symbols — domes, spires, and minarets — is a constant reminder of the meaningful and appropriate use of symbolic forms. The complexity of urban design in Jerusalem is heightened by widely divergent views on sovereignty, the conflict between spiritual values and secular needs, and the need to create relevant designs for different cultures. Given this situation, is a consensus on design possible?*

initiated in an insecure imitation of the West by the locals. In Jakarta and Singapore, Lagos and Dakar, Sao Paulo and Caracas, to mention but a few, the enormous growth appeared as parts of a body where the new cells seem to belong to a totally different species from the original organism. They appeared to be eating away at each other in a cancerous carnage, forever raising the questions of adaptability, cultural relevance, and the meaning of tradition.

One could reasonably assume that this insensitivity to how others live begins at home and that Western architects imposing patterns of development and living upon others were equally insensitive to these issues on home territory. Surely the disappointment grew during the decades of urban renewal, as in the notorious case of Boston's West End, which was wiped out and then replaced with anonymous, Kafkaesque rows of apartments. Similar gestures in New Haven, New York, San Francisco, and Chicago demonstrated that insensitivity to life-style and cultural context did indeed begin at home. With all this in mind, the question emerged as to how urban design education could be radically transformed so as to draw into it the full spectrum of issues that begged for attention.

Two components were thus in place — a graduate school whose pedagogical program would greatly benefit by adopting a city as a laboratory for study and investigation and a city in urgent quest for talent and for attention to its planning activities. A missing component was money. The city of Jerusalem itself could not sponsor such a study. Not only was it restricted in terms of available funds, but the protocol and political implications of the municipality funding a Harvard study were much too complicated. If the city had the funds, why should it not commission the Israel Institute of Technology; if it was to initiate a study abroad, why Harvard and not Yale or Columbia? The funds obviously had to come from an independent source.

The necessity for funds was conditioned by the guidelines we had set for ourselves in carrying out the studies. No one should work in Jerusalem without the opportunity to visit the city and to get to know it firsthand. Nor was there any point in faculty and students carrying out studios for the city in a vacuum; criticism and reviews of the work had to come from those who knew the city intimately and not just from outside faculty and professionals who were unfamiliar with it. This meant that in the initial phase, intensive exposure to all the points of view relevant to development in the city was necessary; and as proposals were developed, continuous streams of visitors from Jerusalem would evaluate and review the work, again representing all current points of view. The cost for carrying out all this work and organizing visits to Jerusalem, for retaining specialists and bringing them to Cambridge, and for documentation and publication amounted to several hundred thousand dollars.

Thus I embarked on a process of exploring potential funding sources, assuming from the beginning that the great foundations would not support a study of Jerusalem. There were too many complications from their point of view: would Harvard's involvement tacitly endorse Israel's annexation of the Jordanian parts of the city? As in everything that touches Jerusalem, political implications become significant. The mayor of Jerusalem, Teddy Kollek, recognized from the outset the great benefit to Jerusalem of such a study; hence he became an active advisor in the search for funds.

It was clear that the potential sponsor would have to have an interest in Jerusalem; but he would also have to have an equal interest in architecture and urban design studies. We were well aware of the difficulties of seeking sponsorship from an individual, which is always easier when there is a tangible product — for example, a building or a park or even a university faculty chair that can be named after the donor. A preliminary list of potential donors was identified, meetings arranged, and presentations made. These efforts led to much interest but no commitment. A second list was drawn up that included a number of individuals who had sponsored many projects in Jerusalem and also had a record of support for universities.

To prepare for the second round, I went to New York to meet with Mr. Irving Schneider, recommended by Kollek as someone who could be helpful in introducing the proposal to potential donors. Mr. Schneider had sponsored several programs in Jerusalem focusing on education and had a tie to Harvard through his daughter, an architect who is an alumna of the Graduate School of Design. I presented the proposed study: groups of students would visit Jerusalem with faculty members; they would meet with planners and community leaders representing both the Israeli and Arab communities and with representatives of the Jewish, Christian, and Muslim faiths; they would study the plans carried out to date; and they would develop proposals for various parts of the city. Mr. Schneider had several questions:

1. *Would the study be useful to Jerusalem?* We answered that it would be especially valuable in focusing on major areas that were under development pressure but for which there were no plans — Damascus Gate, the area surrounding the Old City, the major arterial system, and new neighborhoods.

2. *In what way would these studies have value beyond that which might otherwise be carried out by professional consultants?* Consultants retained by the city or any other public agency would be constrained by the policies determined by such an agency. They would not, for example, have the freedom to explore the points of view of various community groups if these happened to be in opposition to official policy. Nor would they be able to develop proposals that might not be the direct expression of such policies. Student studies, on the other hand, would be free from such constraints. Students and faculty would consider it their obligation to assess the needs of the various interest groups in the city; thus they would tend to have a broader view and to consider the long-term repercussions of any proposed development.

3. *Would the results of the study be useful to other cities and not just to Jerusalem? Would they make a contribution to the general field of urban design?* The response was one of cautious optimism. Although one had to recognize the limitations of work carried out within an academic framework, Jerusalem was after all a wonderful prototype. If we learned how to deal with the problems of historic preservation, context, and continuity of old and new, the lessons would be enlightening to many cities.

4. *Was there not a danger that the results of the study would merely be plans on paper and, though published perhaps, have little influence on what is done in the city? Would there not be a tendency to ignore essential economic and other significant constraints, thus rendering the plans impractical?* Because the thrust of the Urban Design Program is to concern students with implementation methods, economic analysis, and other facts essential to the realization of a project, such an approach would be intensified. With the resources available through the study grant, we could involve consultants in these related fields. We could also engage other faculty members and departments at Harvard in studying the legal, economic, and social issues in question. Every effort would be made to have the studies respond to real forces.

The conversation continued for some two hours before Mr. Schneider stated that he found the program worthy of support and would like to sponsor it himself. Elated, I returned to Harvard and proceeded to draft the various documents needed to implement a grant to the university, outlining in detail the scope of the studies. The proposal was submitted to Jerry McCue, dean of the School of Design, and to the university authorities.

As long as the proposed studies remained unfunded, there was a natural tendency to dismiss them as something that might not come to fruition. All this changed as soon as a commitment for a grant had been made. Now, various individuals within the university and the Graduate School of Design responded. A number of letters were received from concerned faculty and alumni. Would the student studies in Jerusalem imply an endorsement of the Israeli position vis-à-vis Jerusalem? Would they be dominated by the policies of the Israeli planning authorities? Would they therefore shortchange the point of view of the Arab community? Similar concerns were raised with Harvard's president. The necessity for a response was also an opportunity for clarifying the basic political terms of reference of the study. If indeed there was a danger that the study would be slanted in favor of a particular group in Jerusalem, this had to be avoided. These points were elaborated in a letter to the faculty:

> The challenge in planning Jerusalem is to evolve plans for development which would respond as closely as possible to the aspirations and well-being of the several hundred thousand people who inhabit the Jerusalem region, a basically humanistic response to the needs of Arabs and Israelis; Christians, Moslems, and Jews; religious and secular; traditional and modern; affluent and poor. With this kind of agenda and objectives, I do not believe there are several scenarios. There might be alternative interpretations, but in terms of objectives, if humanity is to prevail over the political aspirations of limited factions, the journey seeking such plans is common to us all.

We felt that Jerusalem studies should not avoid political questions; they are an integral part of the planning process. No planning decision can be made in Jerusalem without far-reaching repercussions in the various communities, and our studies would be carried out in a manner that would assure that the voice of each of these would be heard.

The larger political questions could be avoided if one were prepared to judge whether the city could remain united (that is, a single metropolitan region) or whether sometime in the future it could be physically divided once more. Everyone consulted, of any political persuasion, agreed that it was inconceivable to consider Jerusalem physically divided in the future. This set the framework for the development of all designs: whether the West Bank became an independent Palestinian state or was federated into Jordan or whether Jerusalem were a single or a divided municipality would have relatively little effect on the flow of traffic, the spread of communities, and other facets of the city's structure. Since at the time of these discussions both the Israeli and Arab sides, including PLO representatives, proclaimed a belief in an undivided city, it was relatively easy to reach an early consensus on this question. With that issue resolved, Dean McCue approved the project.

Although the matter appeared settled, issues continued to brew underground and erupted from time to time. Certain faculty members avoided involvement with the project and put pressure on others not to participate. Students, particularly those from Muslim countries, were advised not to participate. Concern over the choice of Jerusalem as a subject of study gave those considering the project both a sense of heightened excitement and feelings of unease. On one hand, there was a feeling that this was urban design not just anyplace but in a city where the entire world's attention was focused. Hardly a day would pass without some story in the newspapers about Jerusalem — new satellite towns, land expropriation, preservation of historic monuments, sabotage to holy places, UNESCO reports and counter-reports, embassies moving in and out, visits by heads of states, boycotts by others. There was also widespread concern about the sensitive nature of the project and the far-reaching effect the design could have, if implemented. Would a proposed bus station create the opportunity for one bus company to get an advantage over another? Would a residential community proposed on land legally expropriated endorse one particular group's settlement versus another's? The concern was not that the students and faculty would ignore such questions, but that in their relative inexperience and unfamiliarity with the area they would overlook or be unaware of the subtle repercussions of their design proposals.

With the sponsorship in hand and university approval granted, an agreement had to be structured with the municipality of Jerusalem. We wanted the cooperation of the municipality and the city engineer.[1] We wanted access to studies, surveys, and information. We wanted the benefit of the municipality's feedback, advice, and criticism, but we did not want to be bound by their policies and decisions. We wanted the freedom to consult with everyone and to reach our own conclusions.

The initial proposal presented to the donor had listed some of the projects considered worthy of study and the sequence of studios to be established over a period of two years. Before we could embark on specific projects, it was necessary to clarify the larger questions that the study would be addressing. A checklist of six major issues was drawn up. These issues pertain to every city; to a greater or lesser extent, they pertain even to cities with relatively little historic heritage. For clarification it should be explained that we were not identifying the necessary ingredients for any successful urban design — the resolution of diverse land uses, responsiveness to the qualities of site, the necessity for reconciling economic forces, and so on — but rather addressing the more profound questions facing us in city design generally.

1. *The meaning and value of tradition in design.* Having emerged from several decades of a design philosophy that turned its back on the past, we felt it was necessary to address this fundamental concept in the Jerusalem studies. In the cultural baggage of recent decades, there are the proposals by Le Corbusier for demolishing half of Paris and replacing it with towers-in-the-park as continuous zigzag buildings. Other proposals by Mies van der Rohe and Ludwig Hilberseimer for urban fabrics are different from anything that existed earlier. There is a new town surrounding almost every historic European city which has little resemblance to the city that preceded it. All these proposals make a very clear statement about the meaning and value of tradition. Once again, this issue was being faced in Jerusalem. What indeed is the meaning and value of tradition in design?

2. *The architecture of symbols and their appropriateness.* Our more immediate preoccupation in the profession has been to rediscover the importance of symbols in architecture. The lack of any discussion or exploration of meaningful symbols in the heroic days of the Modern movement is now counteracted by an obsession with icons. This has led to many controversial designs and to the discussion of what constitutes a meaningful symbol. The question of when such a gesture is appropriate was raging in the profession as these studies began. Nowhere did this question become more relevant and emotionally charged than in Jerusalem. This is, after all, the city of symbols. The center of three world religions, it is a mosaic of icons; each form, each shape, each detail provokes memories and feelings. One could not be high-handed or frivolous about symbols in Jerusalem. What, indeed, are appropriate symbols in the new architecture of Jerusalem?

3. *The question of harmony or contrast in the new construction for Jerusalem.* This was not a new issue; architects have faced it time and time again when charged with designing buildings in a historic area. Should they aspire to harmony and continuity, blending in the new

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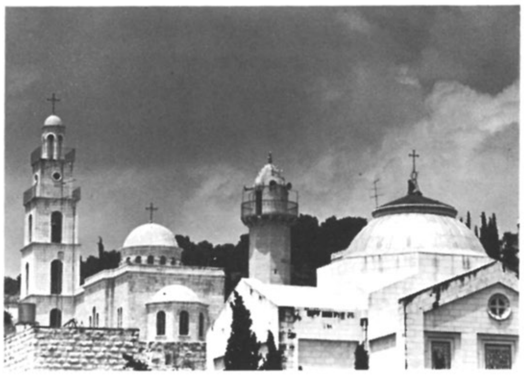


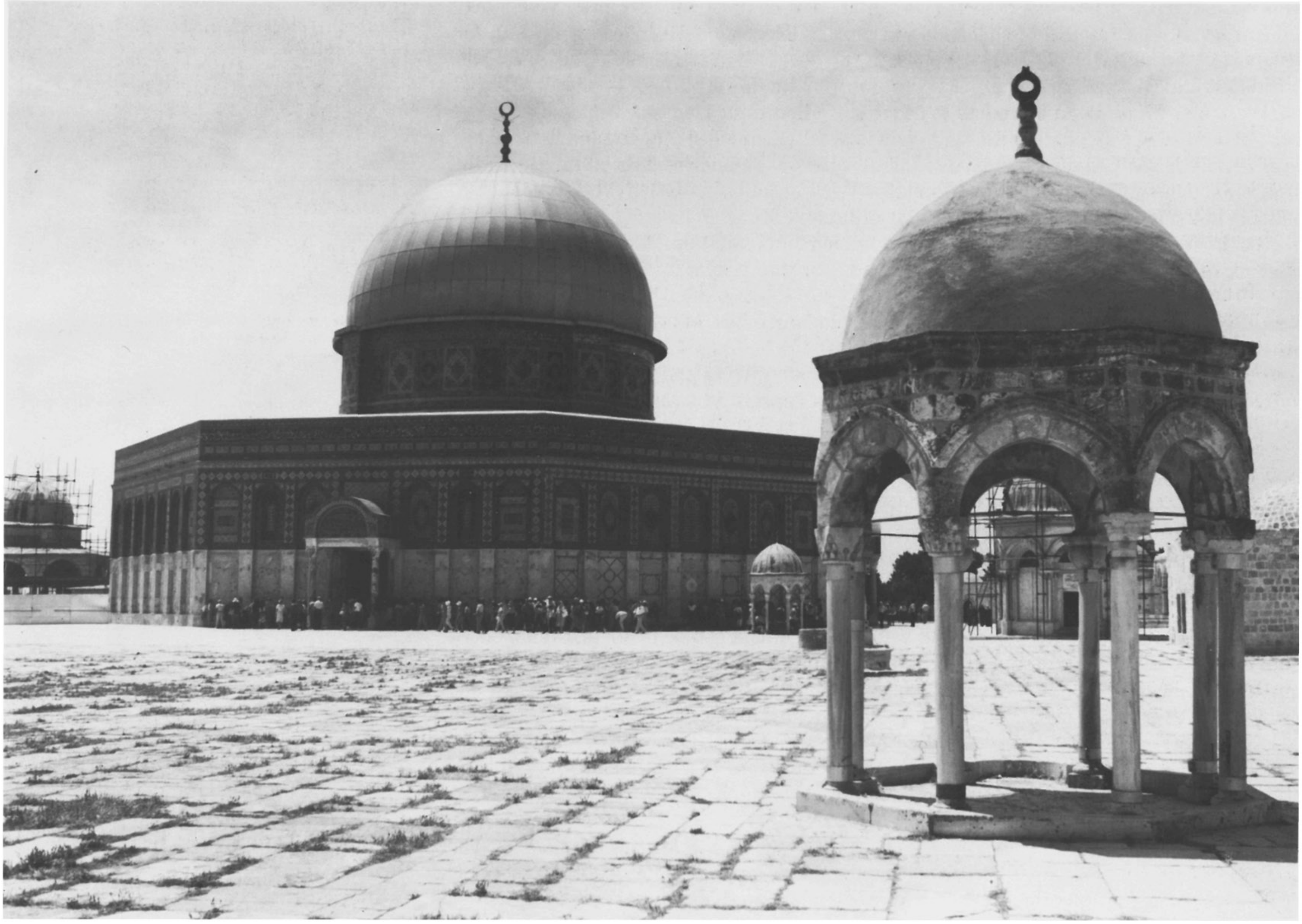
**0.8** *Each religious group has made a clear statement of its presence in Jerusalem.*

**0.9** *Stones of the Wailing Wall.*

**0.10** *The Dome of the Rock as viewed from the Temple Mount precinct.*

**0.9**

**0.10**



with the old? Should they assert their own culture and contrast with the past? One has to remember that in Jerusalem the question was being raised perhaps for the first time. In the distant past, the conquerors of Jerusalem were not preoccupied with that question; each sought to carefully erase the presence of the past. Temples were cut down, burned, and destroyed, and whole sections of the razed cities had to be rebuilt. The granite columns of Herod's Second Temple became the foundation for Omayyad palaces. The remnants of Byzantine buildings were reused by the Crusaders. Even as recently as 1948 the ancient passion of erasing the presence of the enemy prevailed as the Jordanians blew up and demolished every major public building in the Jewish quarter of the Old City of Jerusalem.

In the twentieth century this has been a fundamental question. Architects building in Florence or Rome have sometimes crafted in stone or stucco in order to be complementary and not stand out, while others have devised elaborate buildings of high-technology glass and steel. Clearly this is a question of style and, more fundamentally, of urban form. Style affects visual perception at the scale of interaction of a person to a building. City form affects life-style — every experience, every relationship throughout our waking and sleeping hours. What indeed, then, is the appropriate response: harmony or contrast in Jerusalem?

4. *The profound impact of building technology on style and building form.* A discussion of harmony and contrast is somewhat abstract if unrelated to the generator of building form. The process of choosing materials to create buildings is not a matter of open choice; hard realities and structural changes in the economy dictate the evolution of building technology. Natural materials become scarce and are replaced by synthetic ones. Hand crafts become unaffordable and are replaced by mechanical procedures. Stone masons give way to the concrete mixer, stone vaults and wood beams give way to steel and concrete, unheated rooms give way to central heating and air conditioners. And while the argument can be made that the modern building process is capable of imitating almost anything, there is a more profound underlying question: If one believes that from time immemorial it was the connection between building process and style that created the high spirit of architecture, then how are the changing processes going to affect the city of Jerusalem? Is the British legislation of 1918 that every new building in the city must be faced with Jerusalem limestone an anachronistic and romantic attempt to revive the past or a meaningful exercise in establishing urban unity and harmony?

5. *The conflict between contemporary development forces and the heritage of place.* The modern business machine has its formal requirements: modern hotels, offices, shopping centers, servicing for the automobile. The scale of contemporary business and manufacturing is given expression in the demands of developers to demolish an old building and replace it with a tall office building or a high-rise hotel so that "the land can be better used"; to replace a sector of two- or three-story residences with a new shopping center; to clear buildings in order to provide for parking; to cut wide roads so that the commercial development is more accessible; to construct buildings of large and simple volumes, which are cheaper to build and simpler to operate; to produce large floor areas for offices and hotels containing several hundred rooms for efficiency. Though these same questions are debated in New York, Boston, Tokyo, London, and Paris, they take on a more urgent quality in Jerusalem. Visual impact is immediate. A high-rise tower overlooking the Holy Sepulchre or the Temple Mount tends to be more emotionally charged than a high-rise tower over Grand Central Station or on the banks of the Seine. How can contemporary development pressures be reconciled with cultural values?

**0.11** *Constructing a new neighborhood. Building technology has always had a profound effect on building form. If one believes that the connection between building process and style has created the high spirit of architecture, how are these changing processes going to affect Jerusalem?*

**0.12** *An office building looms over the center city neighborhood of Ohel Moshe.*

**0.13** *The qualities of place which have defined Jerusalem for centuries are threatened by erosion. How can contemporary development pressures be reconciled with cultural values?*

**0.14** *A semi-private courtyard in the Nahala'ot. What is the future of these places? What is their role in maintaining a sense of continuity and harmony between past and present?*

0.11

0.12

0.13

6. *Every planning and urban design action affects the people living in the area.* Through decades of community intervention in the years of urban renewal, we became increasingly aware of how widespread the repercussions can be. Building the Baltimore expressways caused the demolition of whole neighborhoods of the black community, which migrated northward within the city and caused an avalanche of successive relocations of other communities. In Cambridge, Massachusetts, communities debate the expansion of the universities into the surrounding neighborhoods. Elsewhere, the needs of big business take priority over the local community. Each situation is an example of the connection of planning and urban design decisions to the body politic. In Jerusalem this complexity is heightened. Not only is one dealing with traditional conflicts between the rich and poor, different races, the needs of business and communities, or government and minority groups, but there are also races and religions claiming different sovereignties. Within each the orthodox and religious groups conflict with the secular and each has a different life-style, culture, and language. Every planning gesture affects and concerns everyone. What appears to be an innocent road connecting two Jewish communities is the site of rampage as Orthodox Jews stone vehicles of

0.14

secular Jews traversing the road on the Sabbath. The social and political implications of urban design are therefore guaranteed to come alive in Jerusalem.

## GENERAL APPROACH TO THE STUDIOS

The program was organized around a series of studios focusing on different parts of the city. We realized from the outset that optimal results would be achieved (both from the pedagogical and municipal points of view) by setting up studios in which faculty and students from all departments in the Graduate School of Design (GSD) participated. As we were to discover, this not only brought together students from the Architecture, Landscape Architecture, and Urban Design departments within the GSD, but also managed to attract City and Regional Planning students from the Kennedy School of Government, who carried out a major study on the city center and collaborated with the design studios. (This was particularly satisfying as it was only a year earlier that Harvard's president had decided to relocate the City and Regional Planning department from the GSD to the Kennedy School, having come to the conclusion that as a department dealing primarily with policy analysis, it fit better in the school of government.) For several years attempts had been made, without much success, to bring about collaboration between planning workshops and the design studios. The Jerusalem studies seemed to overcome the barriers.

It was essential for the students and faculty to become acquainted with Jerusalem and its people, so a series of study trips was organized for each group prior to embarking on its studies. On arrival in Jerusalem, they attended field trips, lectures, and seminars. During the ten days, little time was left for sleep: there were walking tours through the Old City, a walk along the city walls, visits to the holy places, and guided bus trips to all the neighborhoods and outlying satellite towns. In the evenings and on certain days, there were lectures and seminars; briefings on the master plan by the city engineer and his staff; presentations on the economic condition of the city and its real estate patterns by specialists in the field; briefings on the proposed transportation networks; presentations and discussions with several different architects, including Ram Karmi and Elinoar Barzacchi, who have carried out plans for the various new communities.

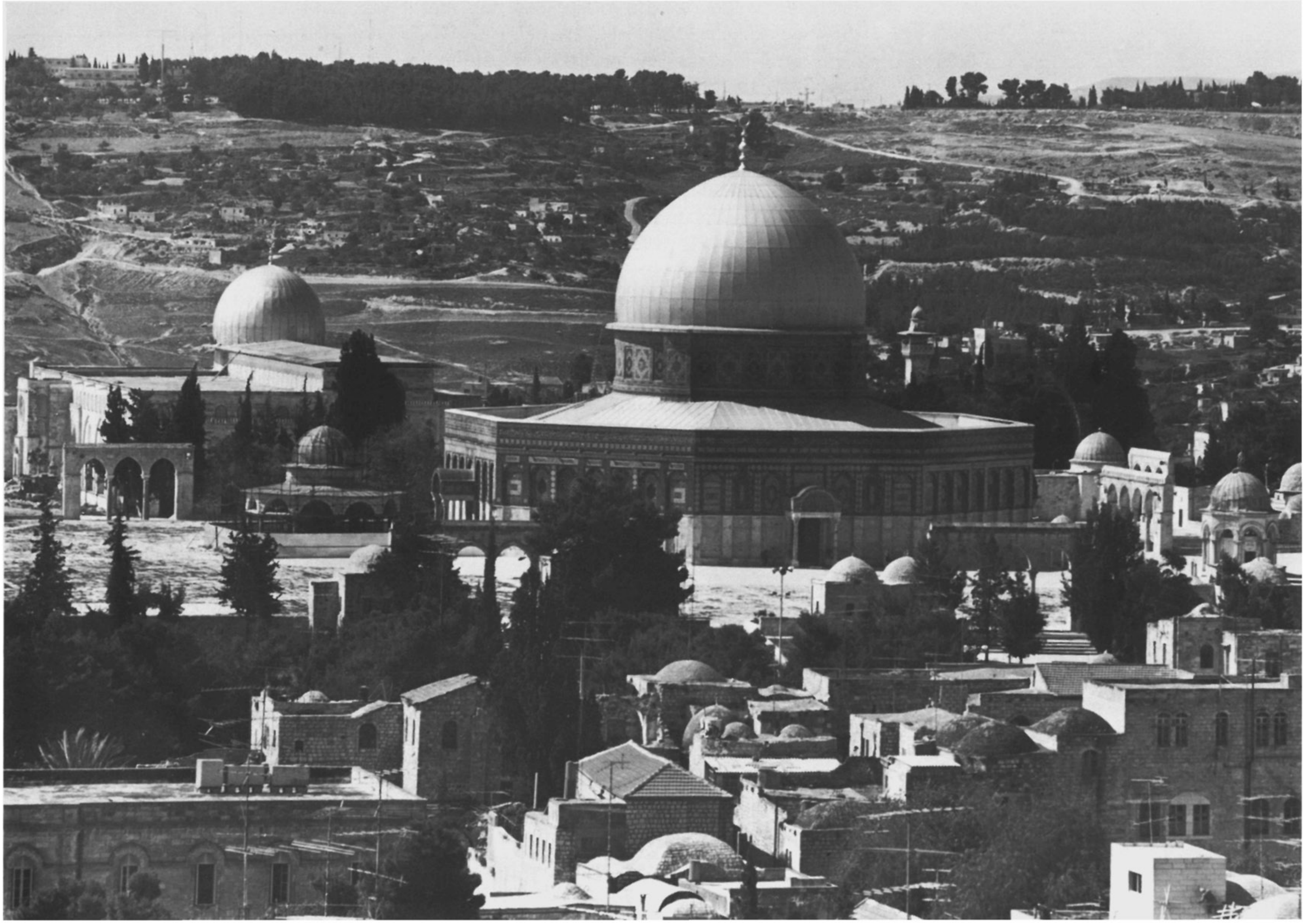
There were also the less predictable meetings designed to expose the students to every point of view. Discussions were held with members of Parliament from every political persuasion; with Ibrahim Dakak, head of the Palestinian Alliance, a Nationalist Palestinian with PLO ties, and an architect by profession; with Farid Abu-Ghosh, who runs the community service centers in the Arab sector of town and who spoke of the problems of providing reading and writing lessons to married women and of programs designed to make the city population better able to cope with development; with Farik Barakat, the head of the Arab Chamber of Commerce; and with Eliezer Ronnen, chairman of the board of the Central Jerusalem Development Corporation. There were also meetings with poets and historians. Yehuda Amichai, one of Israel's foremost poets, read his poems; Yoram Kanyuk, the Israeli novelist, spoke on the battle of Jerusalem in 1948, in which he had taken part at the age of seventeen.

To make the field trips more effective, the students were asked to measure, record, and document various neighborhoods. The city was divided into different sectors and assignments made. Each sector was drawn, including plans, sections, and perspectives, and basic statistics were developed outlining the building types, circulation system, densities, and other relevant patterns. Thus an inventory was established of so-called building patterns of development for the Old City, the outlying villages, the neighborhoods built at the turn of the century outside the city walls, the garden suburbs of the 1930s, and the satellite towns of the 1970s.

I shall return to the results of the studies and attempt to summarize their value after examining the proposals made for the different parts of the city. It is important to note here that the studies yielded two gratifying conclusions. The first has to do with Harvard and the pedagogical objective of the Graduate School of Design. For many years it had been the objective of the dean and chairman of the Department of Architecture, Landscape Architecture, and Urban Design to bring the groups into closer collaboration. There were many attempts at collaborative, multidisciplinary efforts. Invariably one group would shy away, feeling that its skills were not complementary. Collaboration between landscape architects and architects was hard enough, let alone situations involving architects with planners. The Jerusalem studios proved to be the exception. There was something about the city, the study trips, and the relationships that evolved among the students that created the circumstances for effective and enjoyable collaboration. Certainly the experience of the trip was helpful. Many of the students had never left the United States, and now they were spending fifteen hours on a flight, arriving in a new culture, sharing facilities at the university dormitories, exploring new territory, sampling new foods, and, as always with trips of this kind, really getting to know each other. The most adventurous among them managed to get invited to the homes of Arab villagers and Orthodox Jews, to see how people live and to hear their views. But what really brought about the successful collaboration was the fact that every project embarked upon in Jerusalem generates such a wide array of issues that the necessity for collaboration becomes obvious.

The second conclusion was especially gratifying. Not only were meaningful proposals developed for various parts of the city, but somehow the students and faculty also managed to transcend the short-term political conflicts and take a long-term view that seemed to accommodate the major concerns of the various communities. By avoiding the trap of focusing almost completely on the short-term questions and thus the "Catch-22" of conflicting objectives, they were able to consider long-term needs and develop proposals that had the potential for wide acceptance.

**1.1**



# 1 JERUSALEM: A HERITAGE

Jerusalem is a unique and special place; there is no city quite like it. Cliché or not, this is a conclusion that the students reached soon after arrival. What makes this place so special? Why did it become such a significant center, establishing its place in the history of three major religions and in the history of many nations? What is the special visual quality that one senses immediately upon arrival in the city? The students' journey began with an attempt to find answers to these questions, to understand the city's history, its physical features, the quality of its architecture, and the character of its people. Since this exploration became the foundation of subsequent design studies, sharing it will help the reader become familiar with the city and to better appreciate the plans and proposals.

By the year 996 B.C., King David had taken control of Jerusalem and established it as the capital of his kingdom. In 961 B.C. his son, King Solomon, had consolidated the empire that stretched from Egypt to the Euphrates and, with the help of Phoenician craftsmen, was building the first temple, thereby firmly establishing Jerusalem as the holy city of Judaism, the world's first monotheistic religion. It need not necessarily have followed that Jerusalem's significance should persist; many cities in the Middle East were for brief periods a significant center for emerging religions and nations, only to decline as that particular civilization gave way to another. This was not true of Jerusalem: destroyed, it was rebuilt, destroyed, and rebuilt once more. And by the first century A.D. it assumed a significance beyond that of the people of Israel, becoming the birthplace of Christianity.

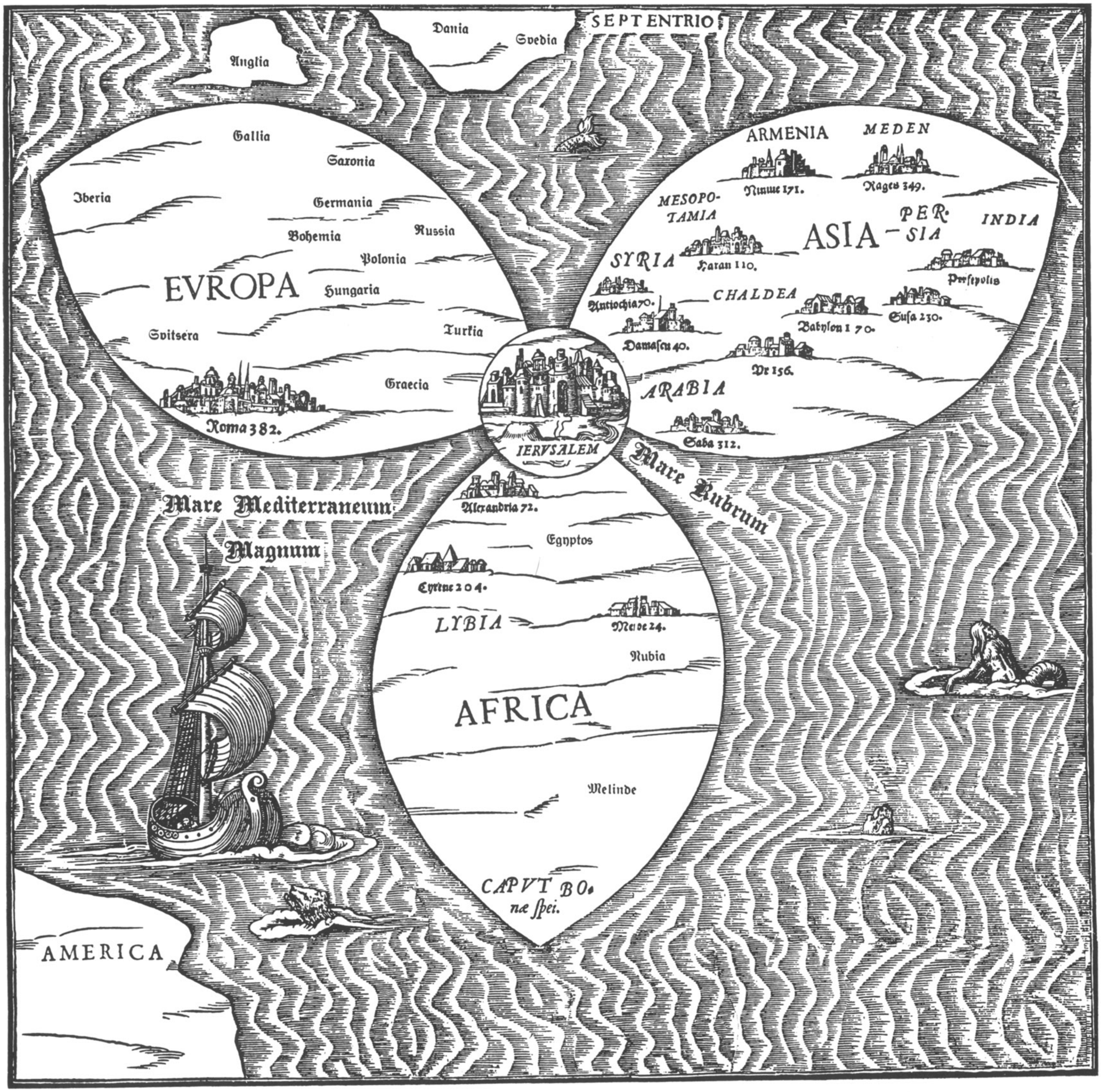
As Islam emerged in the sixth century, its birth centered in the Arabian peninsula. But the links of Islam to Christianity and Judaism were too extensive to bypass Jerusalem and not give it a special place as a sacred center. The Koran tells us that the prophet Mohammed came to Jerusalem and from there embarked on his Night Journey to heaven. With Christianity and Islam expanding, propagating in every corner of the world, Jerusalem's significance expanded as well. From the sacred and national center of a small nation, the Israelites, Jerusalem became a world center of all monotheistic religions.

One cannot come to Jerusalem without sooner or later asking why this city, perched on the mountain plateau and somewhat isolated, acquired its significance. There is probably no clear answer. It is quite clear that the land of Israel-Palestine and its principal city, Jerusalem, were located in the crossroads traversed by each of the major civilizations as they explored, conquered, and expanded their influence in the region. Palestine's position between Egypt to the south, Assyria and Persia to the northeast, and Greece and Rome to the northwest meant that each of these civilizations had to go through Jerusalem to reach its geopolitical objectives. Thus Abraham settled in Canaan only to have his sons and grandsons move to Egypt during a period of hardship. And thereafter, when Jerusalem had been established as a religious and national capital, waves and waves of armies, conquerors, and colonizers came upon it: the Egyptians going north; the Hyksos coming into Egypt; the Greeks and Philistines settling the coast; the Persians coming upon the Greeks; Alexander journeying toward Egypt and the east; the Romans expanding the Empire; the Byzantines, the early Muslims, and the Crusaders seeking the Holy City; the Mamelukes repelling them; and the Ottomans, the British, the Israelis, and the Jordanians making claims.

When biologists attempt to explain the beginning of life, they speak of certain ideal conditions — fertile moments in which in the universal slush of inanimate cells, the right

1.1 *The Dome of the Rock and the Mosque of Al Aqsa dominate the huge platform of Temple Mount (Haram es Sharif). In the background is the Hill of Evil Counsel.*

1.2


SEPTENTRIO
Dania
Svedia
Anglia
Gallia
Saxonia
Iberia
Germania
Bohemia
Russia
Polonia
EVROPA
Hungaria
Svitsera
Turkia
Graecia
Roma 382.
ARMENIA
MEDEN
Ninive 171.
Rages 349.
MESOPOTAMIA
PERSIA
INDIA
ASIA
SYRIA
Haran 110.
Persepolis
Antiochia 70.
CHALDEA
Susa 230.
Babylon 170.
Damascu 40.
Ur 156.
ARABIA
Saba 312.
IERVSALEM
Mare Rubrum
Mare Mediterraneum Magnum
Alexandria 72.
Egyptos
Cyrene 204.
LYBIA
Meroe 24.
Nubia
AFRICA
Melinde
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AMERICA

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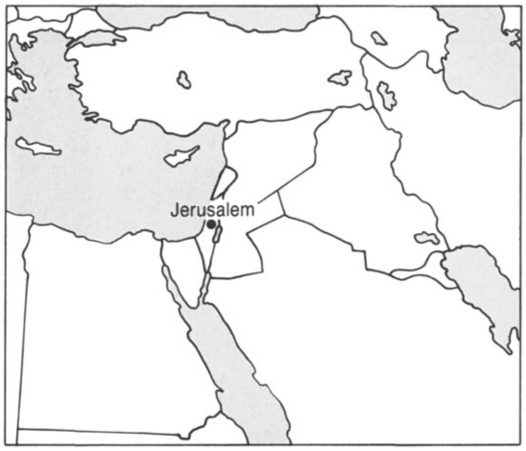


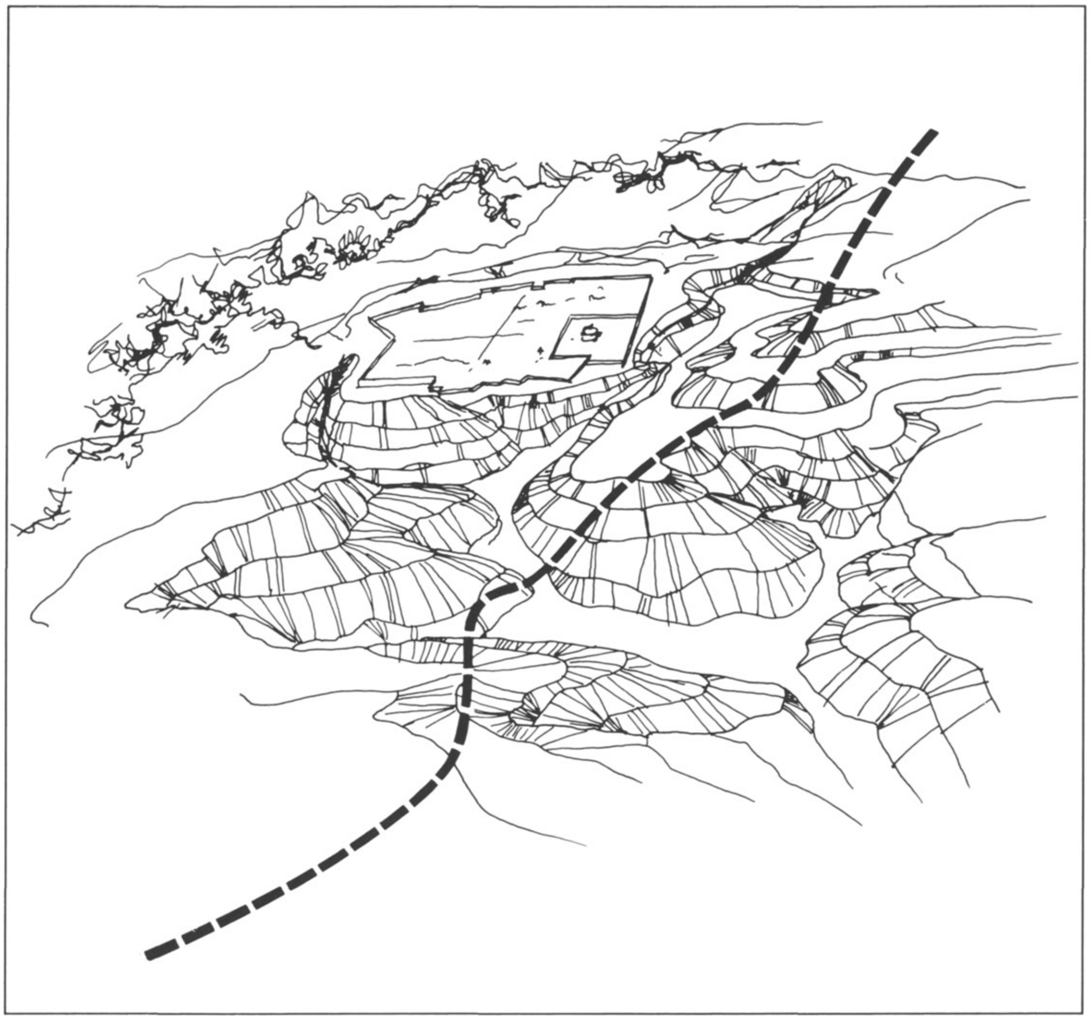
temperature, humidity, and oscillating movement of currents and countercurrents eventually create a cell that lives and reproduces. Once the living cell comes into being, it then multiplies, combines, and recombines, and life forms evolve. It is these special conditions that are conducive to the evolution of the cell, necessary to the beginning of life. It is possible to think of Jerusalem in similar terms. Set on the mountain plateau at the edge of the fertile crescent, a major center of civilization of the emerging literate humanity, it was then fertilized by waves and counterwaves of civilizations with their cultures, their beliefs, their rituals, their skills. With the birth of the first monotheistic religion, with Jerusalem as the first cell, the inevitable and unarrestable process began.

**1.2** *Early mapmakers often represented Jerusalem as the center of the world, as shown in this late sixteenth-century German map.*

**1.3** *Jerusalem's location in the Middle East.*

**1.4** *A city between desert and fertility. The watershed line between the Judean desert and the coastal plains of the Mediterranean runs just west of the Old City.*

**1.4**



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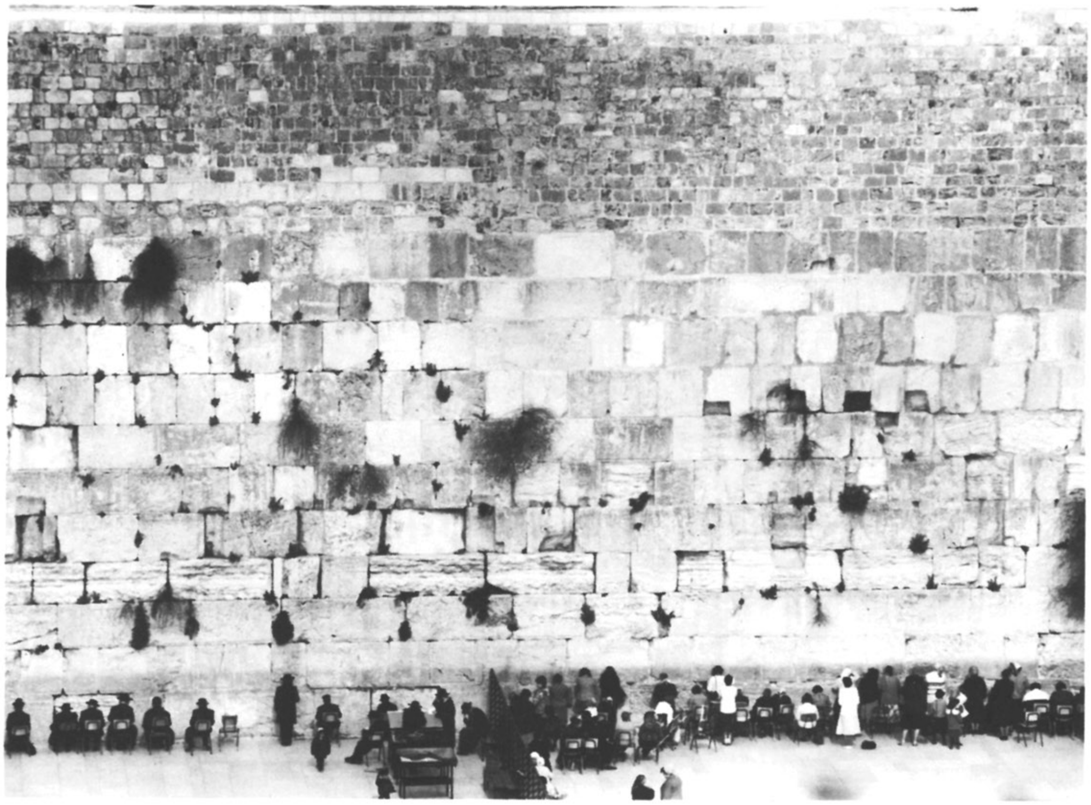

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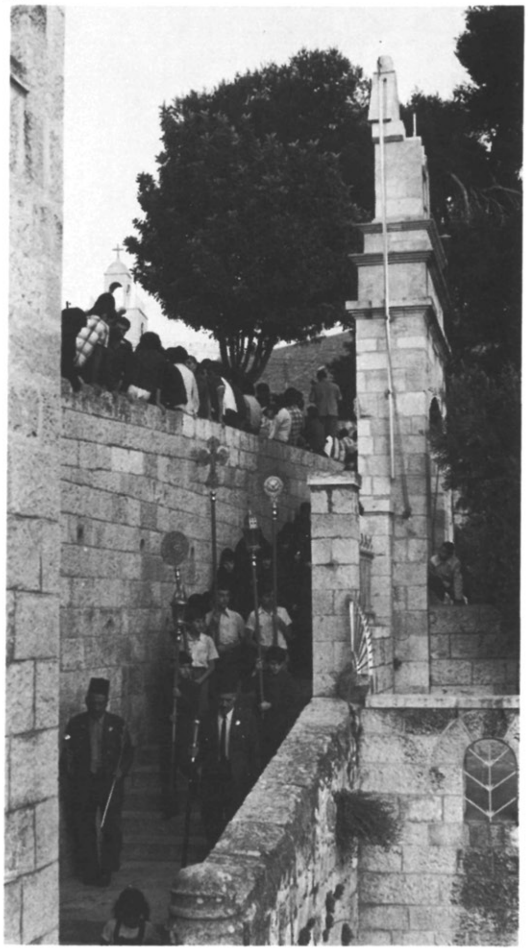
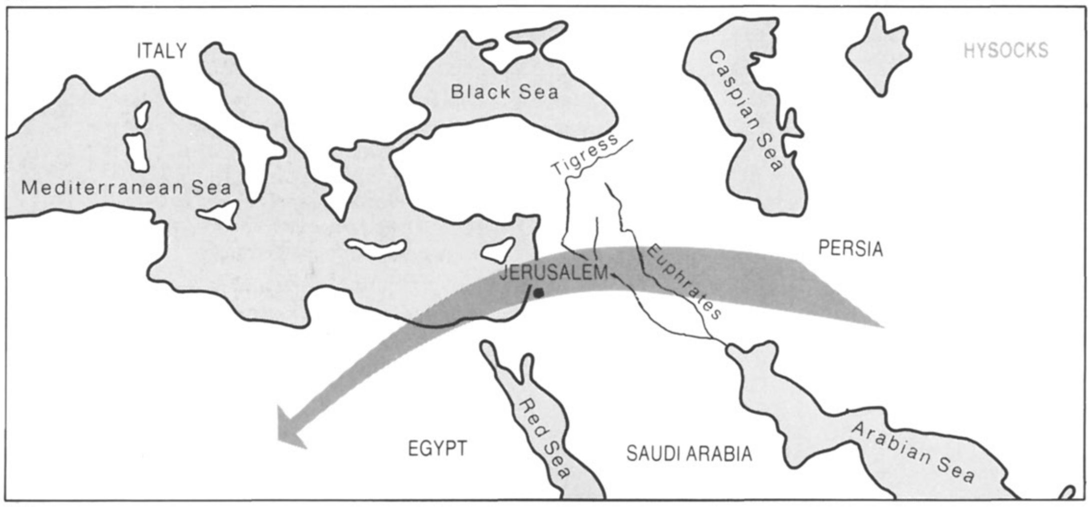


**1.5** *Jews in prayer at the Wailing Wall, known also as the Western Wall.*

**1.6** *Muslims in prayer on the Haram es Sharif.*

**1.7** *A Christian pilgrimage on Via Dolorosa.*

**1.8**



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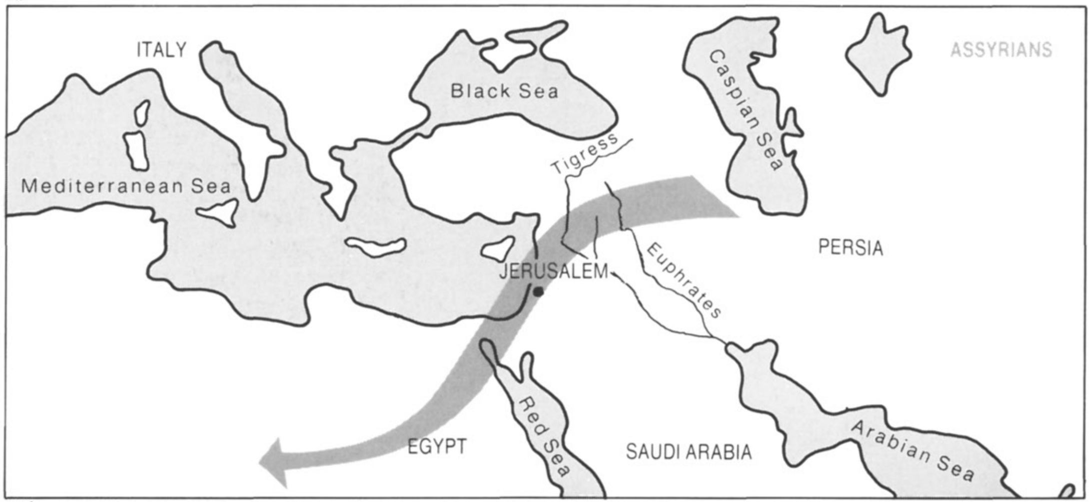

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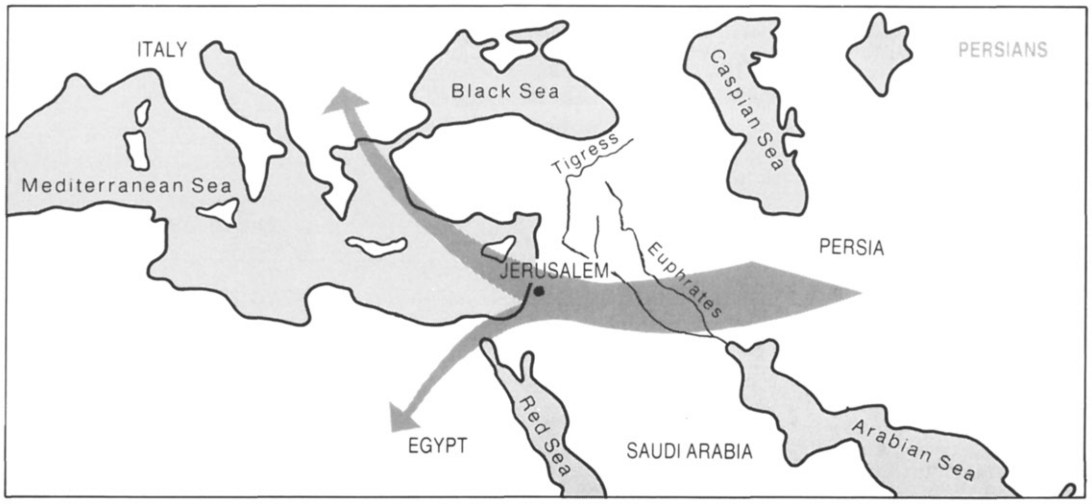
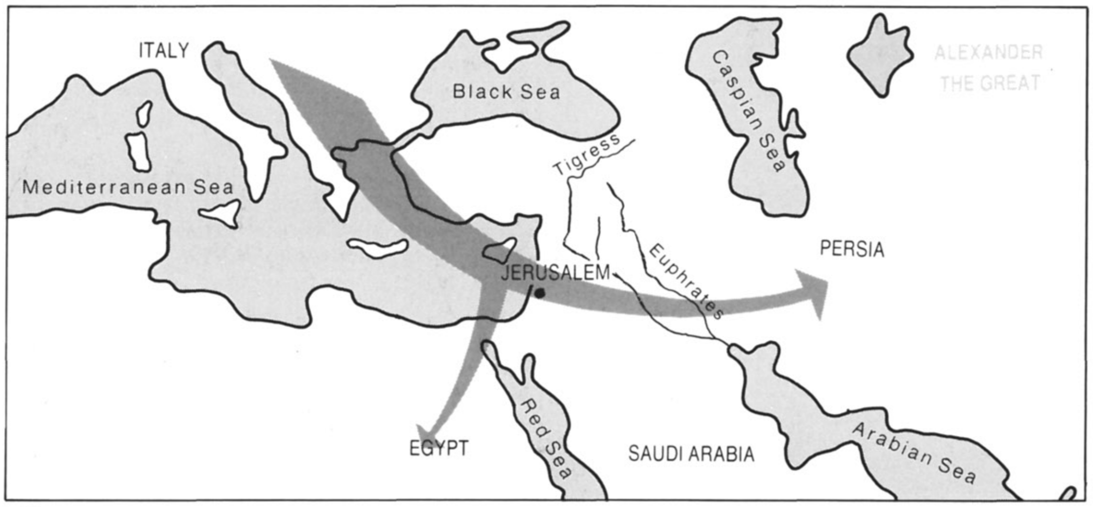


**1.8** *As the first invaders from the north, the Hyksos ruled Egypt from the eighteenth to the sixteenth century B.C. Although they built little, they introduced the horse-drawn chariot and composite bow, which permitted subsequent empires to rise around Jerusalem.*

**1.9** *With Babylon as their base, the Assyrians rose to power and conquered all of Mesopotamia. In their struggle to conquer Egypt, Jerusalem was caught in the middle but did not fall.*

**1.10** *After conquering Babylon in 539 B.C., the Persian empire stretched from Turkey to India. Under the benevolent rule of Cyrus II, Jews were permitted to return and rebuild Jerusalem, which had been razed in 587 B.C.*

1.11



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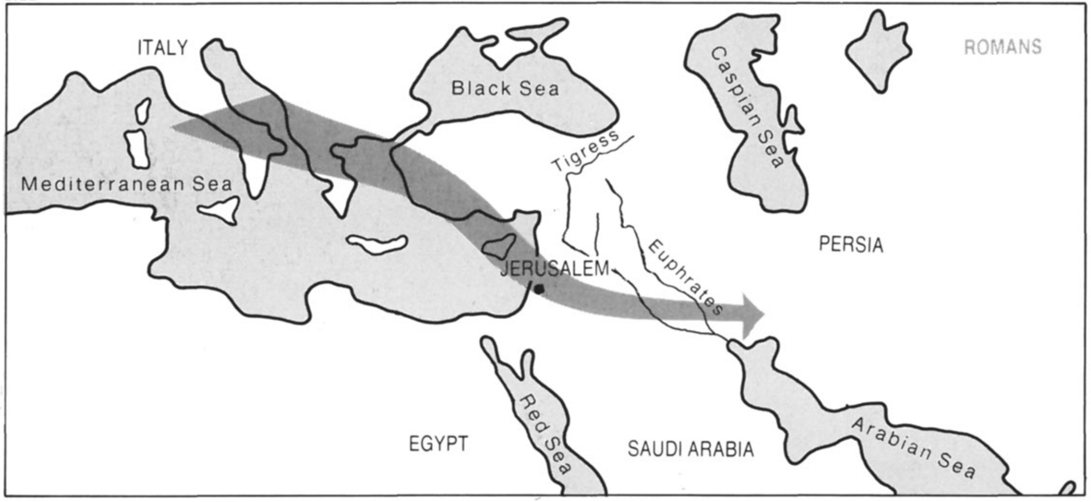

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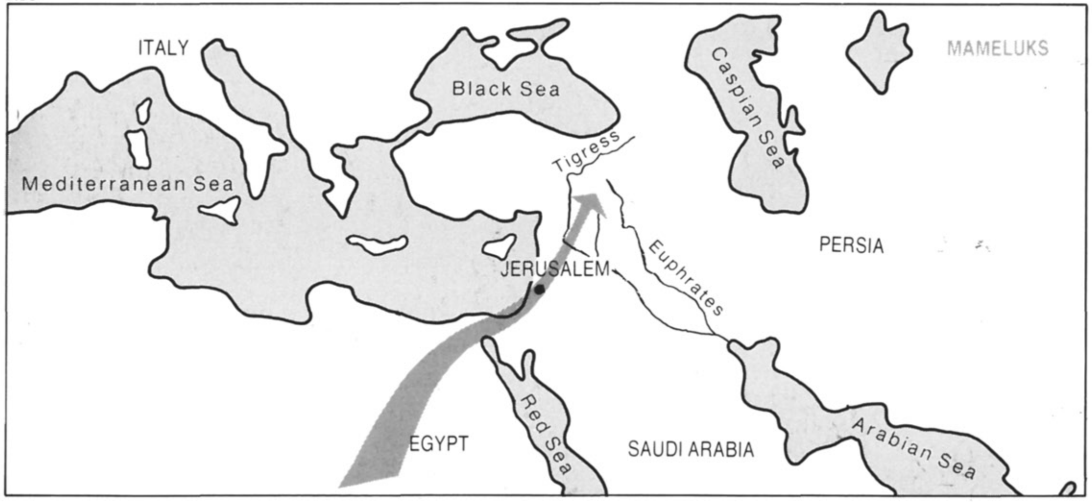

**1.11** *As Alexander the Great pushed through the Middle East toward Asia, Hellenistic thought and culture were spread throughout the region.*

**1.12** *The Roman conquest of the Middle East placed Jerusalem at the outer reaches of the empire. Under Roman rule, the city was destroyed and rebuilt in numerous political rebellions. As the Roman empire contracted to Constantinople, Jerusalem became a focus for Christian pilgrimage and devotion.*

**1.13** *From 1382 to 1516, Egypt, Arabia, and Syria were governed by the Mamelukes from Cairo. Under their patronage an extensive building campaign was initiated to establish the city as a seat of Islamic learning.*

**1.14** *Archaeological site south of the Temple Mount. The Al Aqsa Mosque was built on the remains of the Royal Herodian Stoa, which was connected to the City of David area through the Hulda Gate and the Royal Stairs.*

## A MOSAIC OF ARCHITECTURAL PATTERNS

The uninitiated visitor might first think of Jerusalem as a homogeneous architectural conglomeration. It is, after all, unified by the special golden Jerusalem limestone and identified today by the city wall built by Suleiman the Magnificent in 1538. There is a danger, however, of missing the great diversity of building forms that make up the heritage of the city. Just as the differences between an Israeli and an Arab were at first difficult for the students to discern, so at the beginning the buildings of the different cultures appear misleadingly similar. As the city becomes familiar, the eye begins to make distinctions, for there are in Jerusalem well-preserved segments representing the widest array of architectural history. The massive walls of the heroic Herodian construction of the second temple represent the best Roman construction of the day. The remnant cruciform pattern of Roman streets, the cardo and decumanus, are now built over into the network of somewhat less formal Crusader markets. The generous wide-spanning domes in the Byzantine construction of the Holy Sepulchre and the ornate tiled early Muslim structures, the Mosque of Al Aqsa and the Dome of the Rock, contrast with the pure austerity of the Crusader church of St. Anne. The ornate *madrassas* (schools) of striped red and white inlay stone on the Mameluke buildings are juxtaposed to the complex vernacular of domed and vaulted structures of the Ottoman era contained by the Suleiman wall.

It is sometimes difficult to believe that such diverse modes of building and styles occurred in this city throughout its premodern history. A sense of change becomes apparent where the architectural styles of different periods are layered on top of one another. In the western wall there are enormous stones of Herod's Temple — almost a meter high, ten meters long, and weighing about a hundred tons — perfectly fit, with almost invisible joints covered by small rubble-looking stones of Turkish times. Then there are the austere, undecorated stone walls of Ottoman buildings clearly contrasting with the decorated, ornate colored stone inlays of the Mamelukes. Formal and symmetrical axial thoroughfares lined by colonnades such as the Cardo Maximus of Aelia Capitolina are contrasted with the zigzagging, meandering bazaars built during the last five hundred years. To respond to the heritage of Jerusalem requires the recognition of its diversity; to protect its heritage means to recognize, categorize, and protect each facet of its story.

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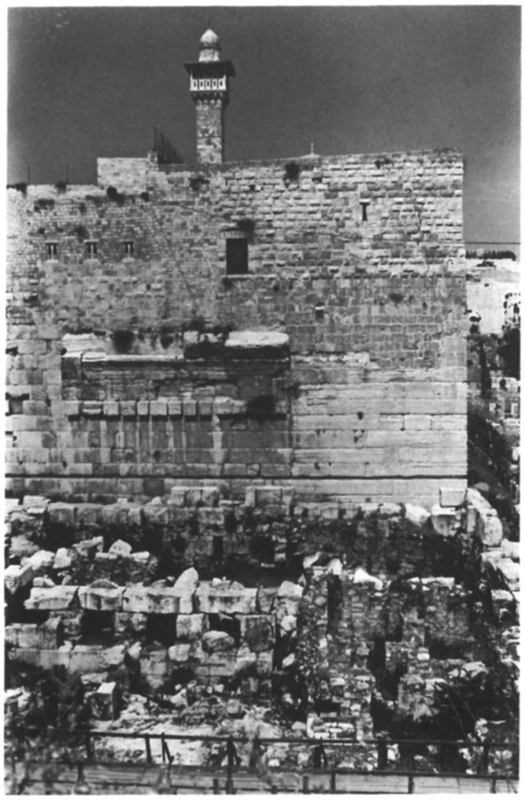

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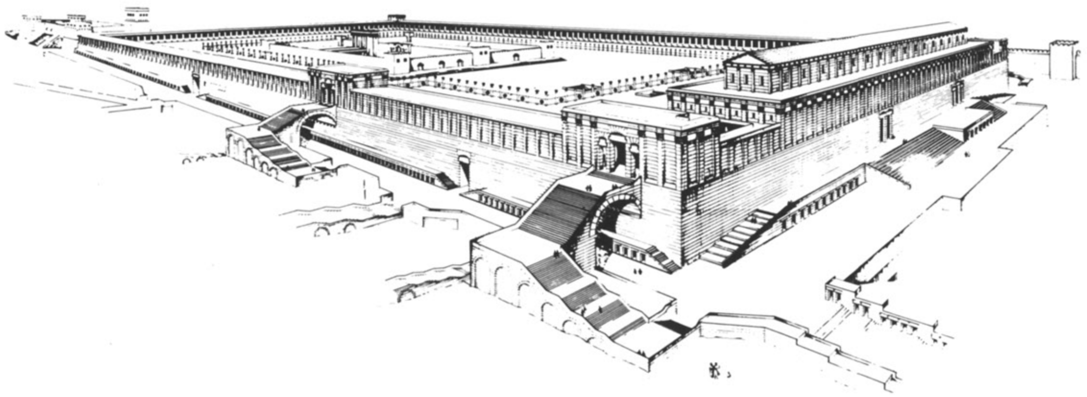


**1.15** *Reconstructed view of the southwest corner of Herod's Temple Mount with the huge stairway connecting the valley street with the South Stoa at Temple Mount. (Reconstruction courtesy Meir Ben Dov)*

**1.16** *Remnants of the Robinson Arch at the southwest end of the Temple Mount plateau.*

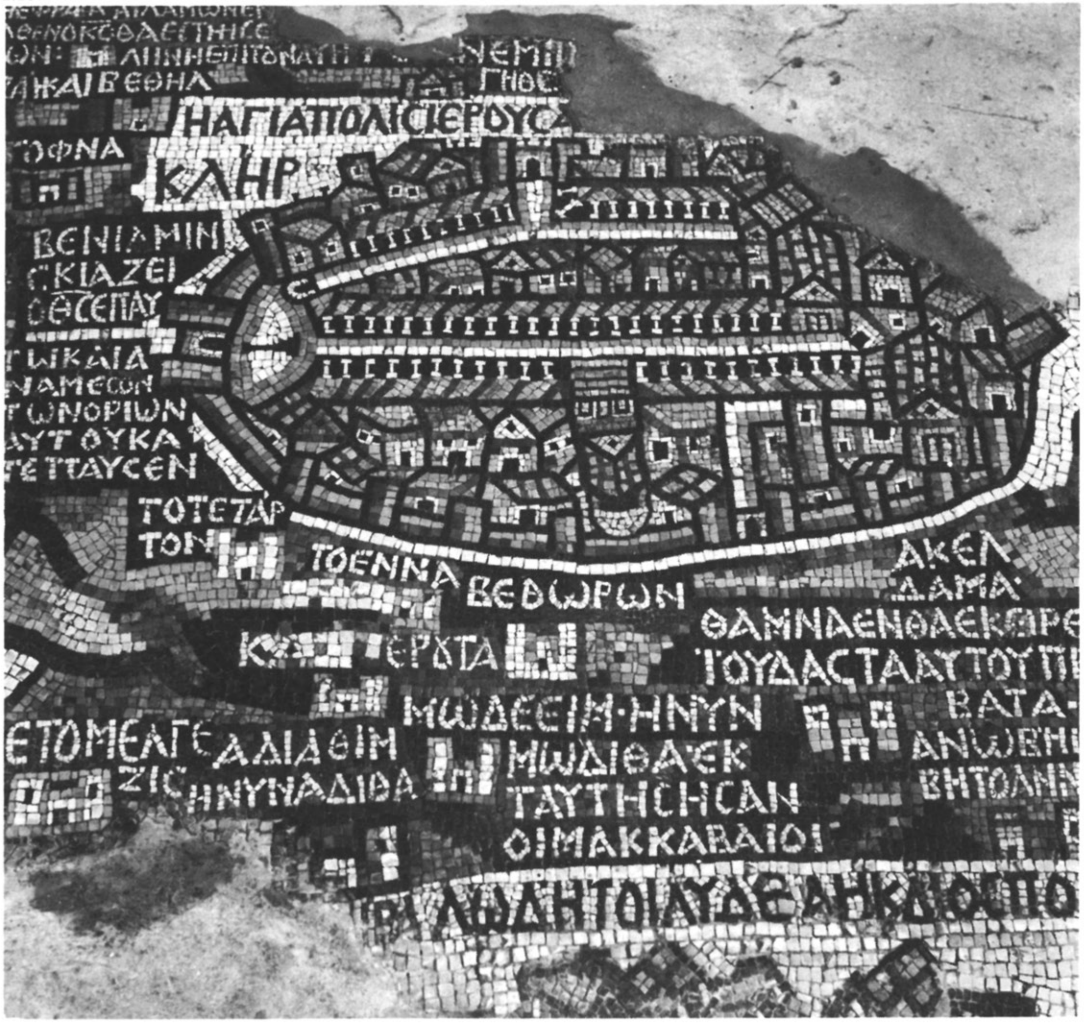
**1.17**

**1.17** *Reconstructed segment of the Byzantine cardo. It was unearthed during construction in the Jewish quarter.*

**1.18** *The oldest existing map of Jerusalem, the sixth-century mosaic found at Madeba, Jordan in 1897. Prominent in the mosaic is the colonnaded Cardo Maximus, running lengthwise, and the large Basilica of the Holy Sepulchre in the center.*

**1.19** *Reconstructed view of the cardo, the primary north–south street in Byzantine Jerusalem. The 23-meter-wide street was colonnaded with market stalls located underneath, a forerunner of the triple markets present today in this location. (Reconstruction by Prof. N. Avigad)*

**1.18**



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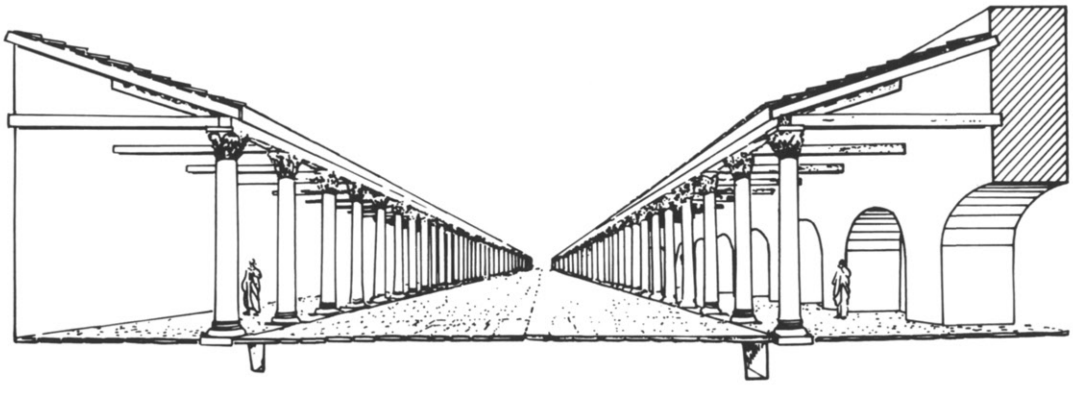

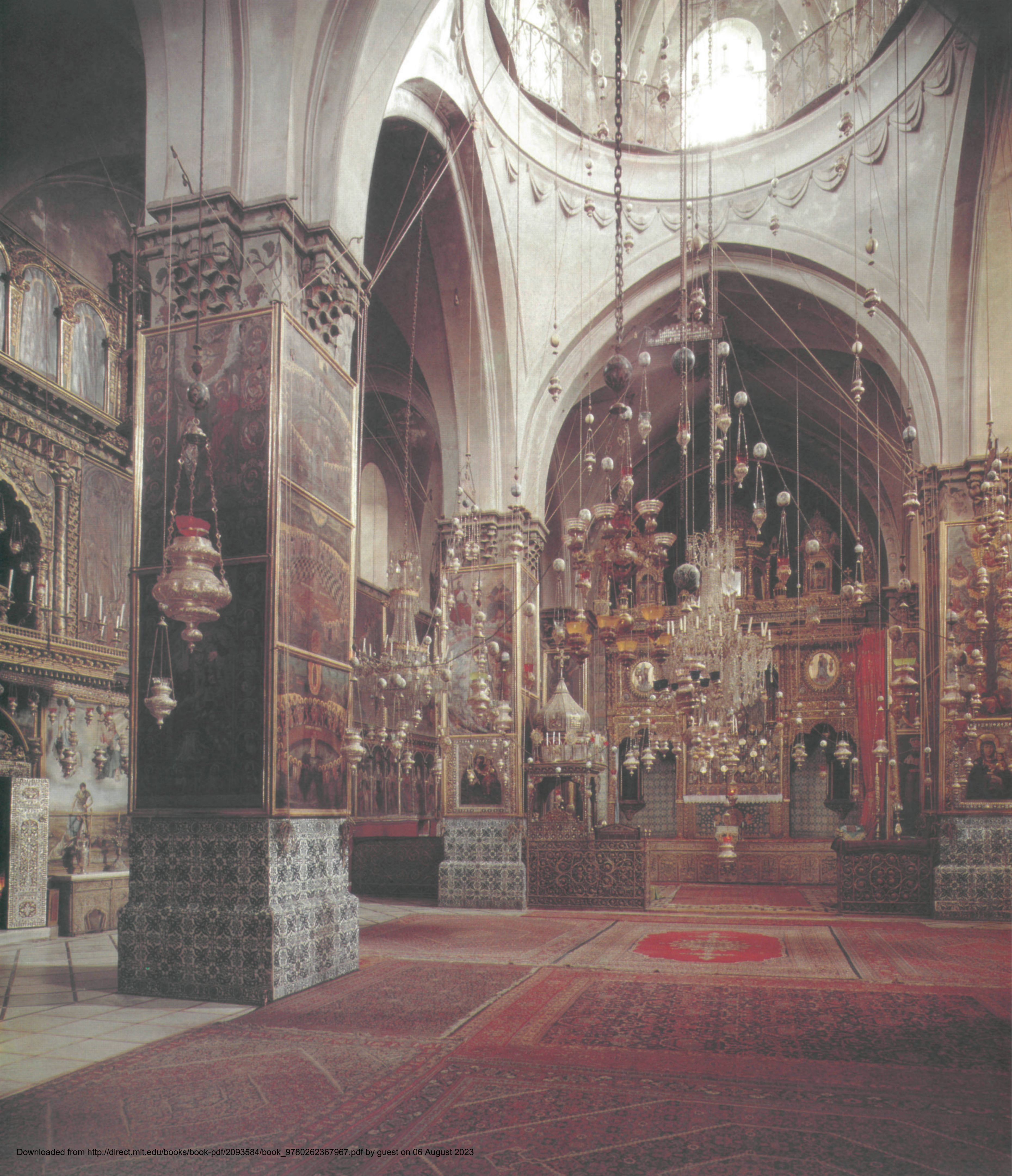

**1.20** *The Cathedral of St. James. Reconstructed by Crusaders in the twelfth century, the church has been lavishly furnished and is the primary church of the Armenian community in Jerusalem.*

**1.21** *Archaeological remain of the Omayyad palaces south of Al Aqsa.*

**1.22** *Sectional view through the central courtyard of an Omayyad palace recently discovered at the southwestern base of the Temple Mount. Serving perhaps as living quarters for religious leaders, the structures had leading from the roof directly to the Al Aqsa Mosque. (Reconstruction courtesy Meir Ben Dov)*

**1.23** *Plan of Omayyad palace and its adjoining buildings. (Reconstruction courtesy Meir Ben Dov)*

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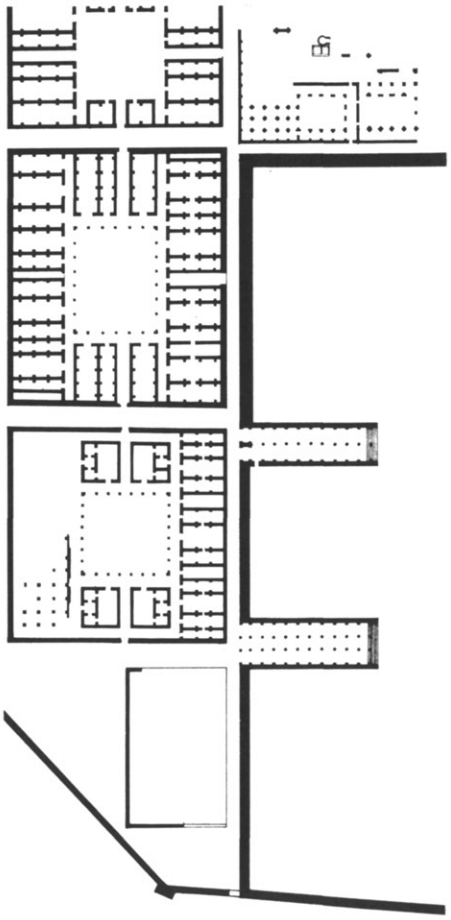

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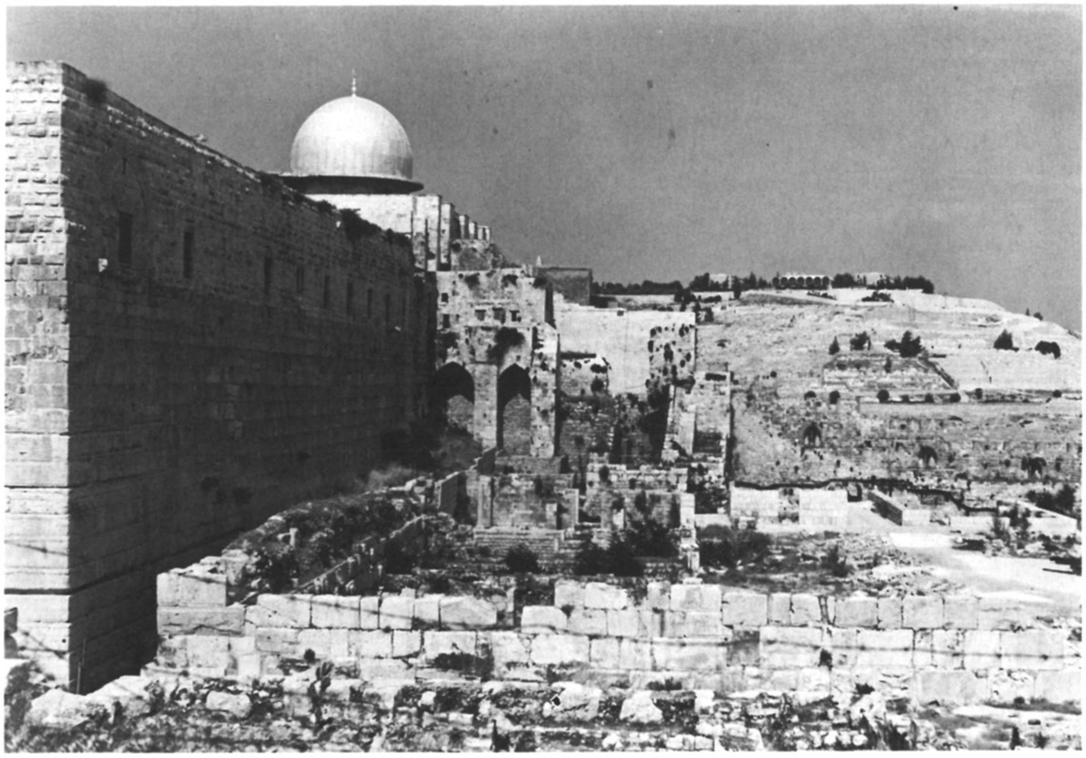

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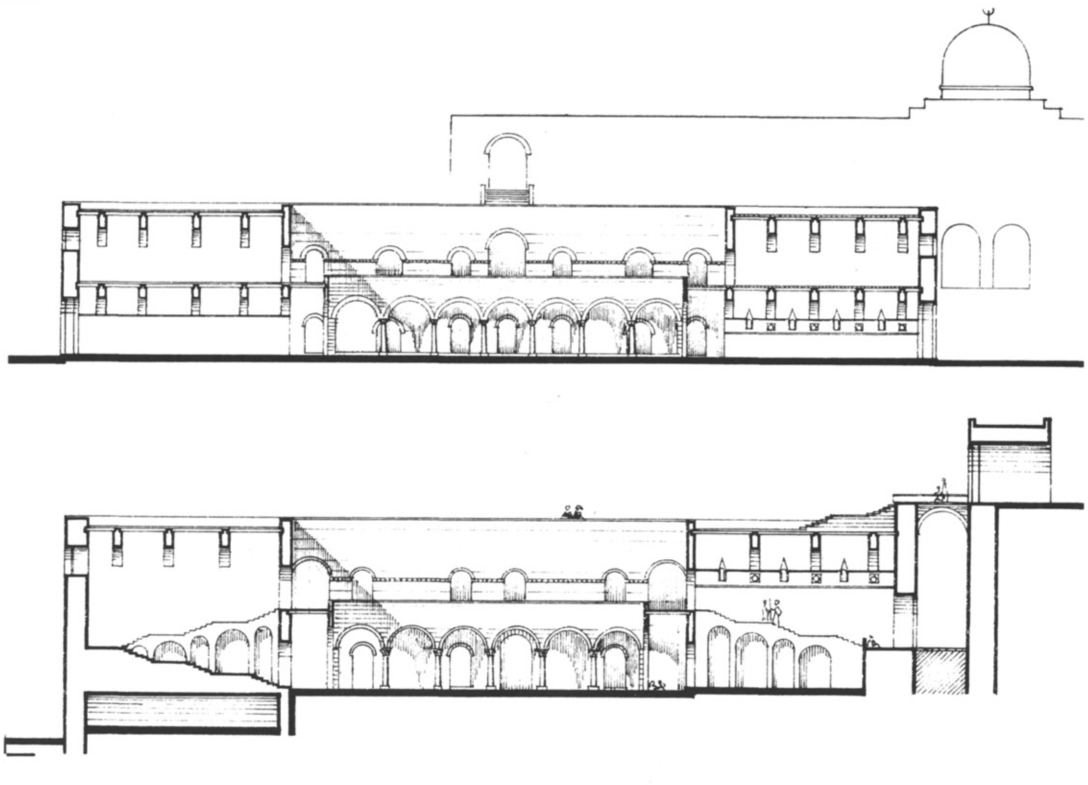

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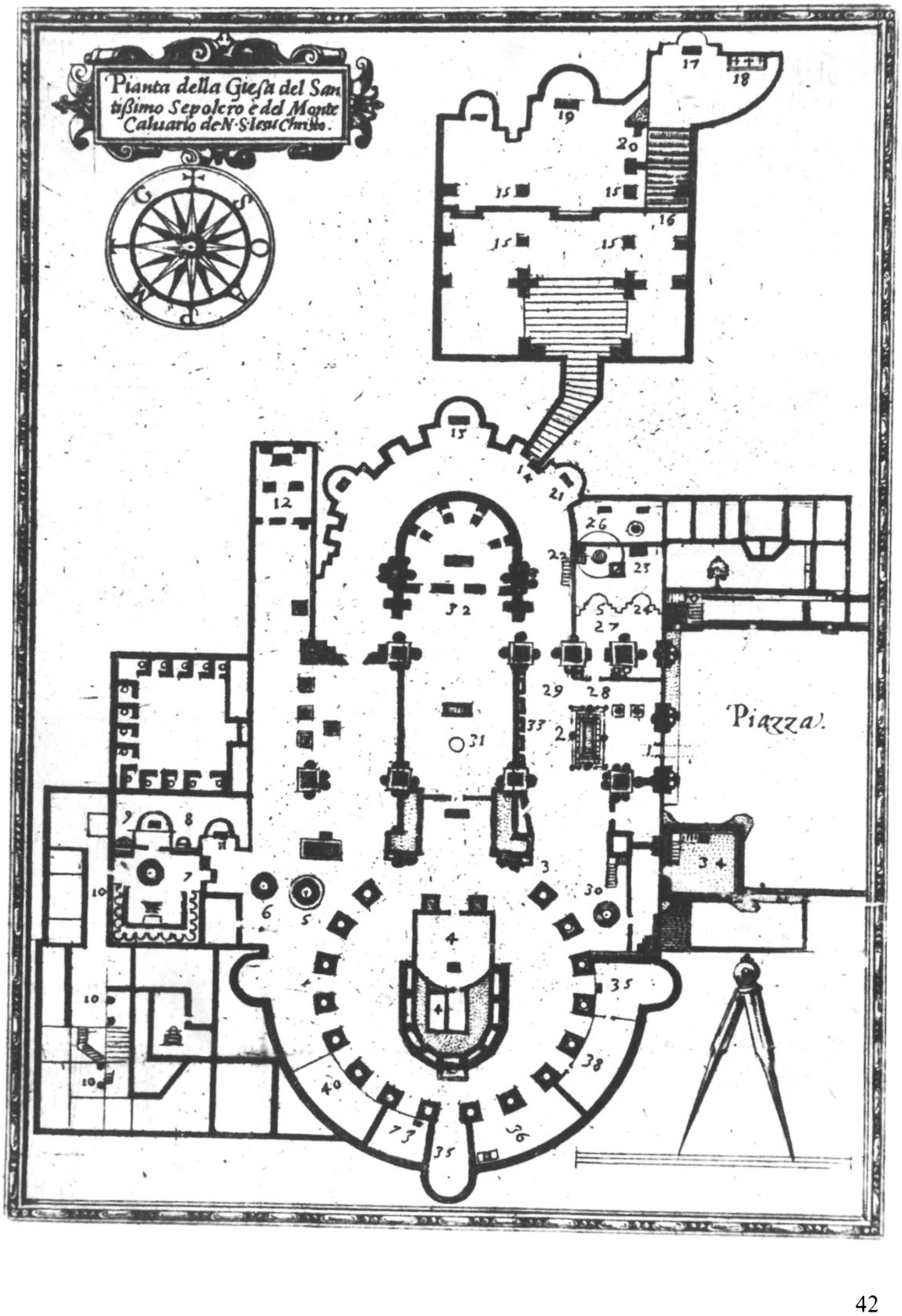
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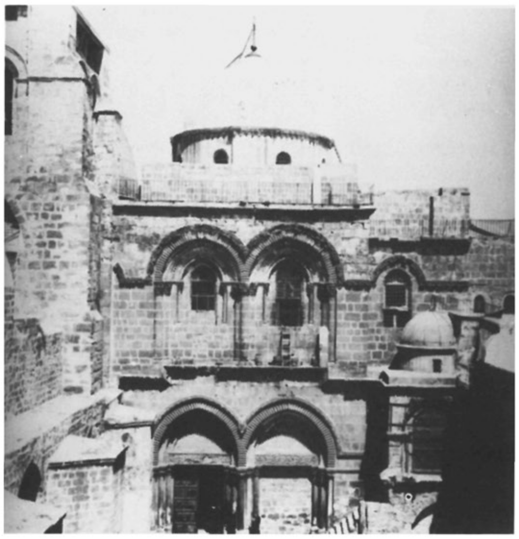
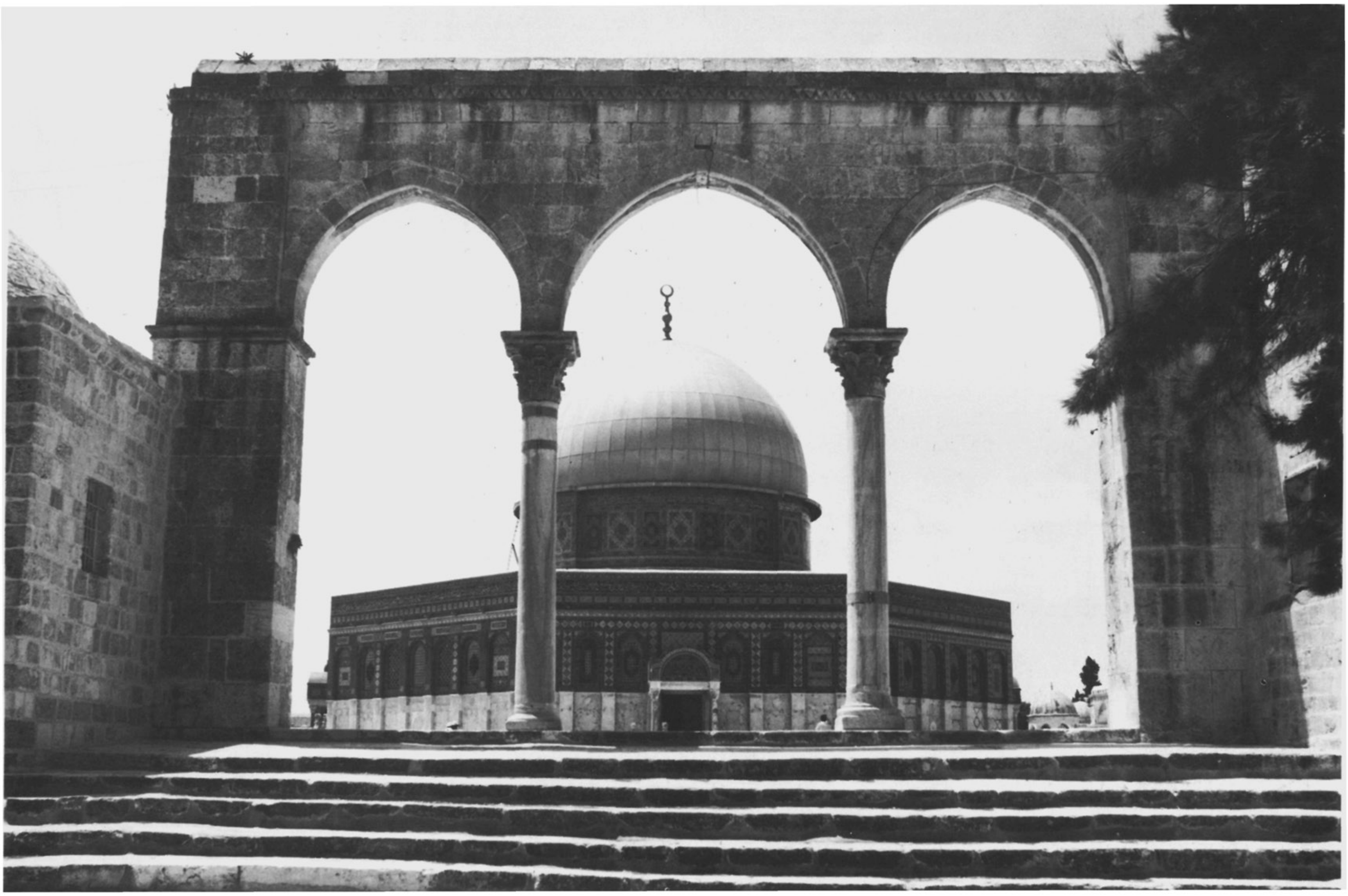


**1.24** *Reconstruction of the Basilica of the Holy Sepulchre at the end of the fourth century. Leading out from the rotunda was a large colonnaded courtyard fronting the cardo.*

**1.25** *The Holy Sepulchre in a nineteenth-century photo, viewed from the courtyard in front of it.*

**1.26** *The Dome of the Rock was constructed in 691 to shelter an outcropping sacred to Muslims and Jews alike. Tradition holds that from this spot Mohammed ascended on his Night Journey and Abraham prepared to sacrifice Isaac.*

1.26



## GROWTH OF THE CITY

Though the growth of the city was confined by the walls, Jerusalem's footprint was not constant through the millennia. David's City stretched down the southern slope of the Temple Mount to the source of water. It was only in the time of the Hasmoneans and later during Herod's kingdom that the city began expanding to include Mount Zion, the western plateau, northward toward where Damascus Gate is today, and even further to a third wall. In time it shrank again to its present walled confine.

The story of the construction of the Ottoman Wall by Suleiman the Magnificent must be told in any book about design and architecture in Jerusalem. A visitor to Jerusalem, on entering Jaffa Gate, will notice to the left two tombs fitting between two buildings protected by a fence and a fig tree. Legend has it that these are the graves of the architects who designed Suleiman's wall. When the wall was completed after several years of labor, Suleiman is said to have visited Jerusalem. To his shock and dismay, he realized that Mount Zion had been left outside the wall and out of the city. The error could not be pardoned, and the two architects were beheaded. So much for the danger of designing for Jerusalem.

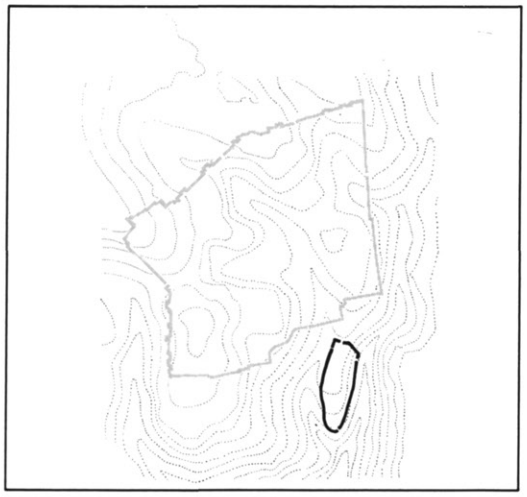
Different styles and building technologies evolved with the changing economic fortunes of the city. But in the city's layered construction, there could not help but be an influence as each age had to accommodate the ruins, foundations, and remnants of the preceding one. Thus, for example, even though the Roman Cardo Maximus had been destroyed long before, the Crusader and Ottoman markets carefully followed its footprints. Where once there had been the single width of a monumental colonnaded cardo, there are now three parallel markets cut down to the scale of Crusader construction. Similarly, the southern wall of the city stretching along both sides of Dung Gate is literally constructed over the foundation wall of the Omayyad Palace of the seventh century. The Al Aqsa Mosque and Dome of the Rock sit upon the plateau created by Herod for the enlarged temple, and Damascus Gate visibly sits atop the Roman gate that preceded it by fifteen hundred years.

From the point of view of building typologies — that is to say, the generic pattern of buildings — two elements seem to stand out in the multilayered structure of Jerusalem. The first consists of the highly deterministic, large-scale constructions in the tradition of the great Roman arcades and walls, such as the walls around the Temple Mount, the Cardo Maximus, and other axial, uncompromising structures that defy topography. In contrast, there is the haphazard, picturesque, complex, three-dimensional maze of the Ottoman city, with alleys changing directions and frequently bridged by houses stacked one on top of the other in complex formations. In this element there are courtyards, roof terraces, and domes of every shape and size imaginable, all submissive to the topography and contained by the city wall.

Despite these major formal differences, however, there is something common to all urban development in Jerusalem through the beginning of this century: the urban fabric was of high coverage, high density, low-rise massing because land was always scarce within the city walls. The city naturally developed densely within the height limitations imposed by masonry construction and convenience — three, four, or at most five floors. The climate, with its long, hot summers and generally brilliant light, made it possible to design buildings with minimal openings that draw daylight from courtyards and alleys. Rather than seeming composed of individual buildings arranged on the land, the city feels quite the opposite, like one continuous mass, out of which courtyards and alleys are removed. As construction began outside the walls at the turn of the century, this pattern was disrupted.

**1.27** *City of David, ca. 1000 B.C.*
**1.28** *Period of Solomon, ca. 950 B.C.*
**1.29** *Period of Nehemiah, ca. 435 B.C.*
**1.30** *Early Hasmonean, ca. 160 B.C.*
**1.31** *Late Hasmonean, ca. 40 B.C.*
**1.32** *Herodian, 4 B.C.*
**1.33** *Period of Agrippas, ca. 44 A.D.*
**1.34** *Aelia Capitolina, ca. 135 A.D.*
**1.35** *Byzantine period, ca. 350 A.D.*
**1.36** *Early Muslim period, ca. 1000 A.D.*
**1.37** *Ottoman period, 1517 A.D.*

**1.27**



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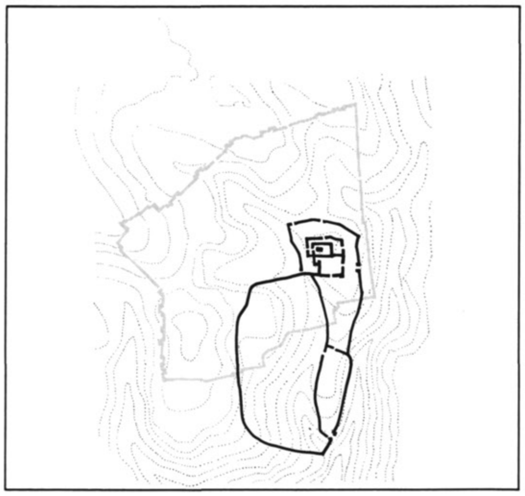

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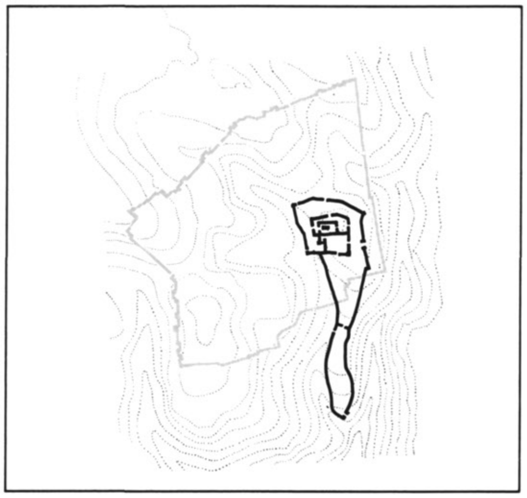

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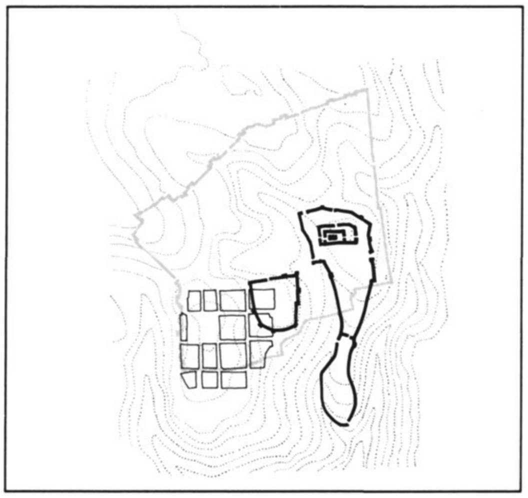

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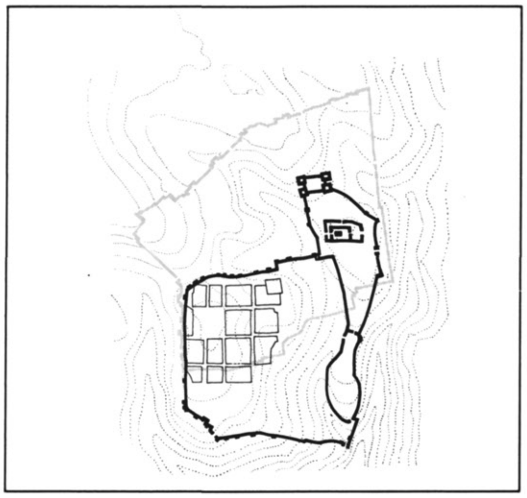

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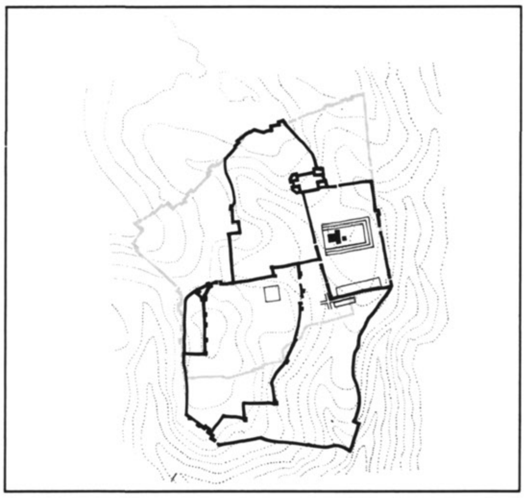

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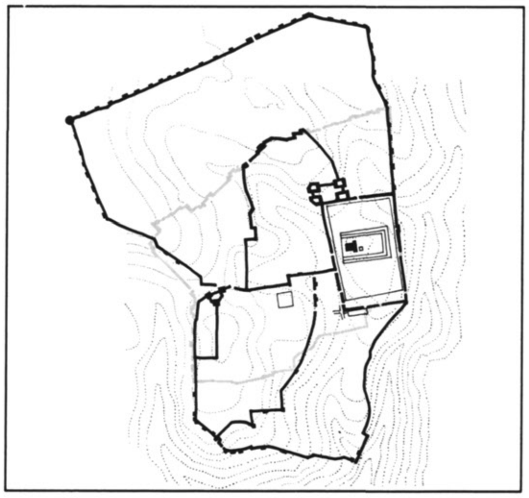

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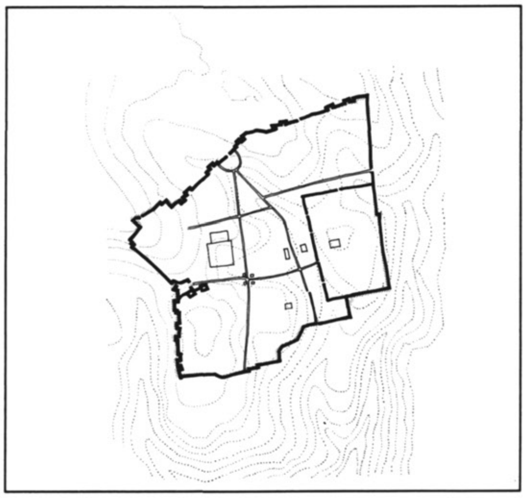

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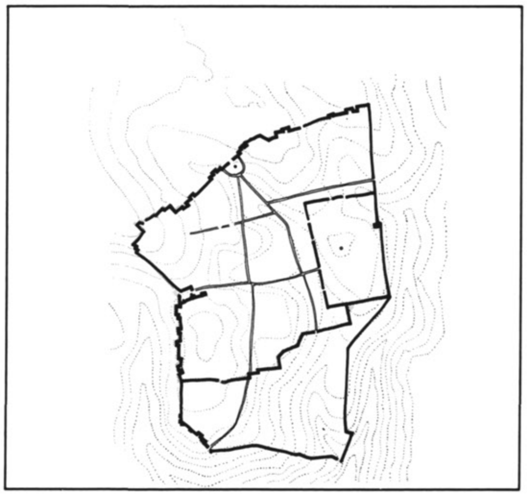

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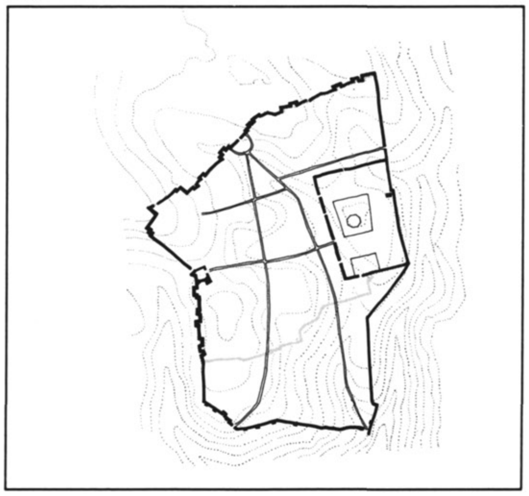

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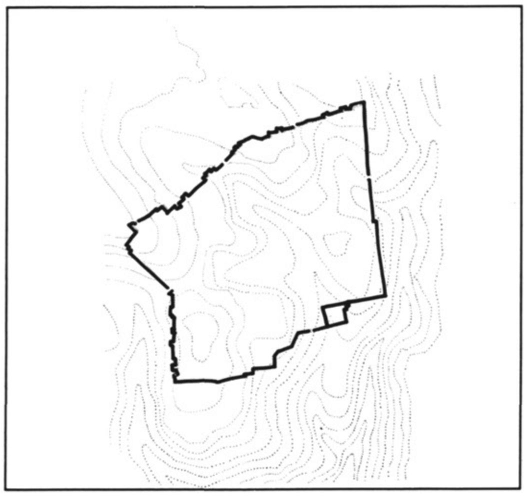


## BREAKING OUT OF THE WALL

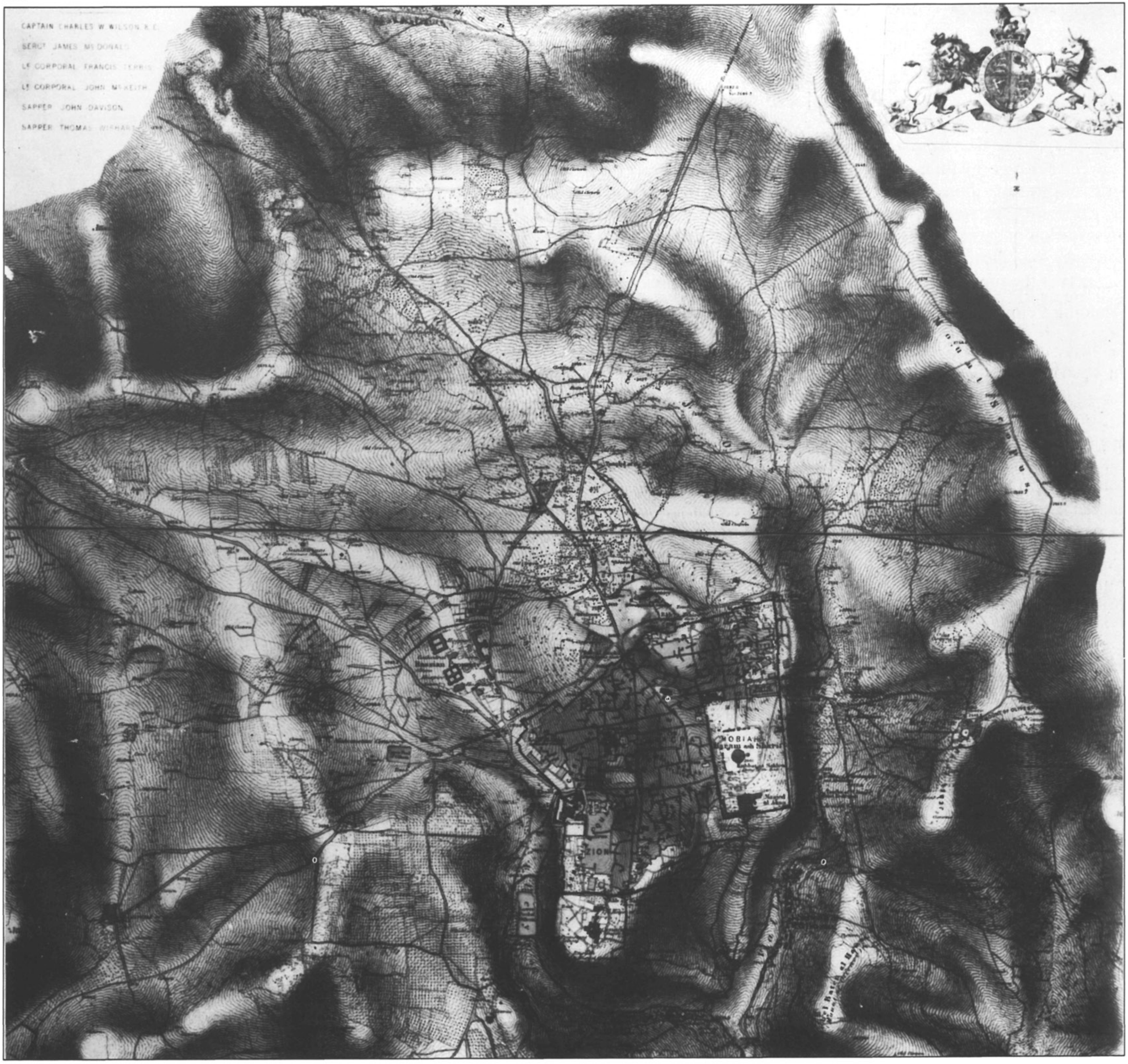
The pressures within the Old City, including the scarcity of land and the growing population, made expansion beyond the walls necessary. The first groups daring to establish settlements outside the security of the city wall were religious institutions. Naturally, these settlements needed their own protection and hence were built as compounds. Near the end of the nineteenth century the Russian compound was built on Jaffa Road on the route toward the west; the Germans built the Schneller orphanage compound; the French, the Notre-Dame de France. By and large these were high-style, eclectic buildings marked by the taste of Europe at the time.

Pilgrims soon forced the creation of additional settlements outside. It was the Jews, who since the 1860s formed the majority of the population of Jerusalem, who first created neighborhoods outside the walls. In close succession several neighborhoods were built, including Yemin Moshe, initiated by the British philanthropist Moses Montefiore, Nahalat Shiv'ah, and the ultra-orthodox settlement of Mea Shearim. The patterns of development were not identical — Yemin Moshe, for example, was constructed in parallel rows on the sloping hill facing the Old City, while Mea Shearim was characterized by great courtyards on mostly flat land. Nevertheless the neighborhoods had much in common: they continued to use the stone-bearing, vernacular construction of the Old City, and they were all clustered compactly, thus making them defensible and clearly demarcating the territoriality of the public spaces within the neighborhood from the hostile world outside.

The first cars and buses were brought to Jerusalem at the turn of the century as immigration, particularly of Jews, increased. Business also expanded, thereby increasing the pressure to develop outside the wall. As is often the case in walled cities, the expansion first took place around the gates; commercial buildings were constructed outside the principal entrances of Jaffa and Damascus gates. These structures were often attached to the city wall and screened it from view on the west and the north. Expansion then extended along the historic routes, with the principal roads being the westerly one leading to Jaffa and the Mediterranean ports and the northerly one leading toward Nablus and beyond to Damascus. Development slowed down with the outbreak of the First World War and the general decline of the Ottomans. The next chapter in Jerusalem's history was to be opened by General Edmund H. Allenby, commander of the British forces that overran Palestine at the end of the war.

**1.38** *A topographical map of Jerusalem completed in the ordinance survey of 1865. The few structures located outside the walls include the pilgrimage compound of the Russian church, northeast of the Old City, and a few scattered religious structures.*

1.38


CAPTAIN CHARLES W WILSON R.E.
SERGT JAMES McDONALD
Lc CORPORAL FRANCIS TERRIS
Lc CORPORAL JOHN McKEITH
SAPPER JOHN DAVISON
SAPPER THOMAS WISHART
ZION

## THE COMING OF MODERN TIMES

The years following World War I brought rapid growth. Jewish immigration from Europe increased, and with the Balfour Declaration of 1917 declaring a homeland for the Jews, the hindrance imposed by the Ottomans on such immigration was eliminated. With the immigration came an increase in capital resources and in the general level of business activity, which also drew Arab settlers from surrounding towns and villages and indeed from outside Palestine.

The British brought modern town planning and an orderly bureaucracy. They initiated a series of measures aimed at protecting the heritage of the city and controlling and shaping its development. The story of the contribution of the British mandate to the development and preservation of Jerusalem is yet to be told, but this is not the place. It is important to note, however, that through British initiative, several of the most eminent architects and city planners of the time were brought to Jerusalem to draw master plans, develop guidelines, and design buildings.

The first plan to be drawn was by Sir William McLean in 1918, followed by the C.R. Ashbee–Sir Patrick Geddes plan of 1922. Both the McLean and Ashbee–Geddes plans declared certain areas out-of-bounds for development because of their historical and archaeological importance. This system was set up four months after the city was conquered by the British; an official communiqué from the military governor claimed that "No person shall demolish, erect, alter or repair the structure of any building in the city of Jerusalem or its environs within a radius of 2500 meters from Damascus Gate until he has obtained a written permit from the military government." These areas included the City of David, the slopes toward the east, the Mount of Olives, and the areas immediately surrounding the city walls. Some of this was wishful thinking, however. Both the McLean and Ashbee–Geddes plans proposed that open park surround the city walls, but by the time these plans were drawn up, the entire area north of Jaffa Gate had been built up and the wall was already invisible. There were neither the resources nor the political will to expropriate and demolish these buildings, which remained in spite of the master plans.

McLean initiated what was perhaps the most significant contribution to Jerusalem's development: the regulation that all buildings in Jerusalem must be faced with the golden-colored Jerusalem limestone, regardless of the actual material of construction. They could be constructed of concrete, steel, or masonry, but had to be covered with stone. According to R. Storrs, the military governor of Jerusalem at the time, the purpose of the regulation was to respect "the tradition of stone vaulting, the heritage in Jerusalem of an immemorial and hallowed past."

As the city grew and conditions changed, several other plans were commissioned. Clifford Holliday developed a plan in 1930, and toward the end of World War II Henry Kendall developed the last plan to be initiated by the British mandate before Palestine was given up and returned to the United Nations in 1948.

The master plans were only one influence on the development of Jerusalem. Independent of official planning, both the Arab and Jewish communities embarked on major new constructions outside the walls, each incorporating its specific character. The Arab construction was very much in the vernacular of the time. Much of the population was being accommodated in the already existing villages that surrounded Jerusalem, such as Silwan and El Azaria. In contrast to the Arab development, which was primarily the result of individual initiatives, Jewish development involved large organizations such as the Jewish Agency and the Jewish National Fund, which had purchased much of the land. The developments made use of the growing numbers of architects, city planners, and engineers who had come to the city with the European immigration. Some of these architects were Bauhaus trained, as in the case of Arieh Sharon and Heinz Rau. Others were trained in European *technions* (technical schools), and all brought with them the lastest word in European urbanism, including Ebenezer Howard's Garden City concepts. The name that stands out during this period is that of Richard Kaufman, who prepared the plans for Talpiot and Rehavia. Other neighborhoods in Bet Hakerem and Bait Vagan followed similar patterns — three-story apartments with diverse entrances in the spirit of European buildings of the time. They featured the familiar curved balconies, circular windows, ship-like pipe railings, and other features of the International Style, except for the golden patina of the limestone. Other features were landscaped gardens, pedestrian parks, and pathways. Kaufman's planning was not confined to the laying out of buildings along streets but included the positioning of major institutions, all of which became community focal points.

These neighborhoods, particularly Rehavia, remain among the most desirable places to live in Jerusalem. This is due not only to their central location, but also undoubtedly to the quality of life that has been created. With the trees and gardens planted in the 1930s now fully grown, the buildings are all well within the tree line (an interesting confirmation of Aldo Van Eyke's theory that the threshold point for successful development is to maintain buildings within the treetops). The three- and four-story buildings accommodate no more than six or eight families. With entrances located on different sides of the building, there is a sense of privacy and territoriality. The garden space that surrounds the building on four sides (the buildings were never attached, and windows and balconies face in four directions) has meant that the different parts could be cultivated and developed by different families. The scale of the street has remained intimate; corner grocery stores and other commercial amenities are located at important intersections. With car ownership extremely low, parking was not a problem. But even today, with the contemporary pressures of increased car ownership, the resulting parking problem, and the infiltration of office uses into some ground-level apartments, Rehavia is still considered an attractive neighborhood.

By the late 1930s Jerusalem's downtown was also well established. It centered on Jaffa Road and Ben-Yehuda Street and was given impetus by the construction of several institutions of significance: the central post office, designed by Austin St. Barbe Harrison, and the headquarters of the Anglo-Palestine Bank, designed by Eric Mendelsohn, who moved to Jerusalem via London after leaving Germany in 1933. Several other commercial buildings and arcaded shops formed the business district, which served both the Jewish and the Arab communities as well as the growing international community.

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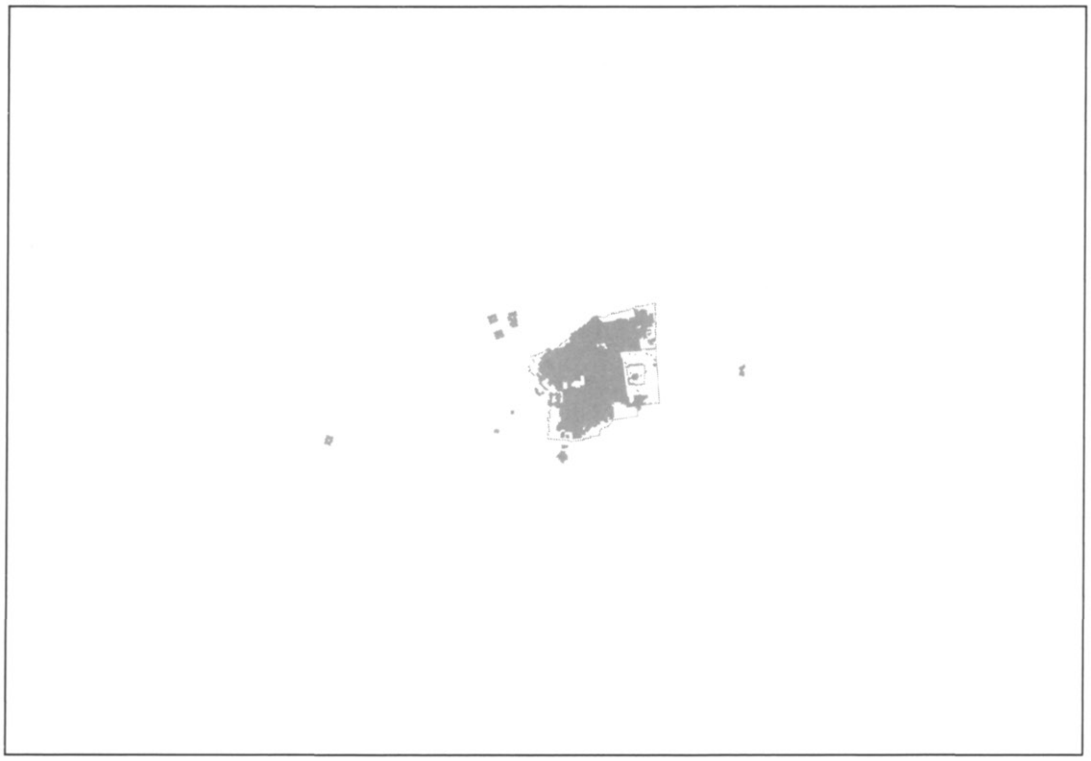

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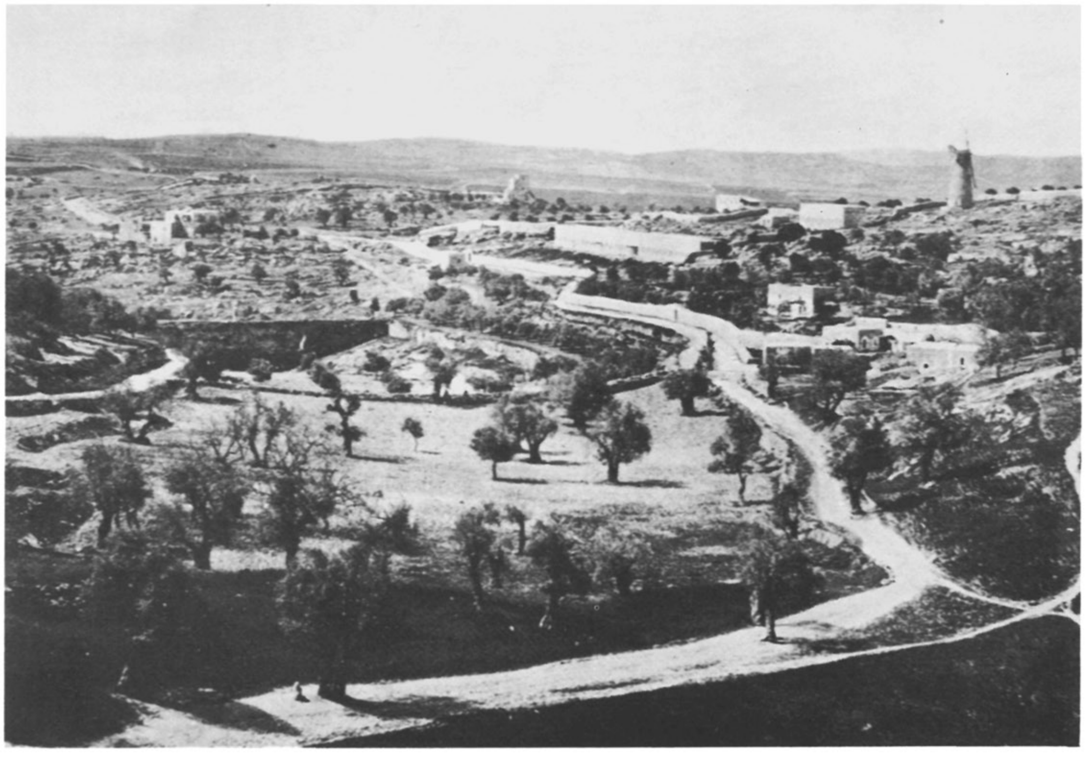

**1.39** *Pilgrims near the cathedral in the Russian compound, 1900.*

**1.40** *Extent of urbanization by 1910.*

**1.41** *View looking south from Jaffa Gate in 1893. In the center lies the road south to Bethlehem and the Hinnom Valley, and on the right is the windmill of Mishkenot Sha'ananim.*

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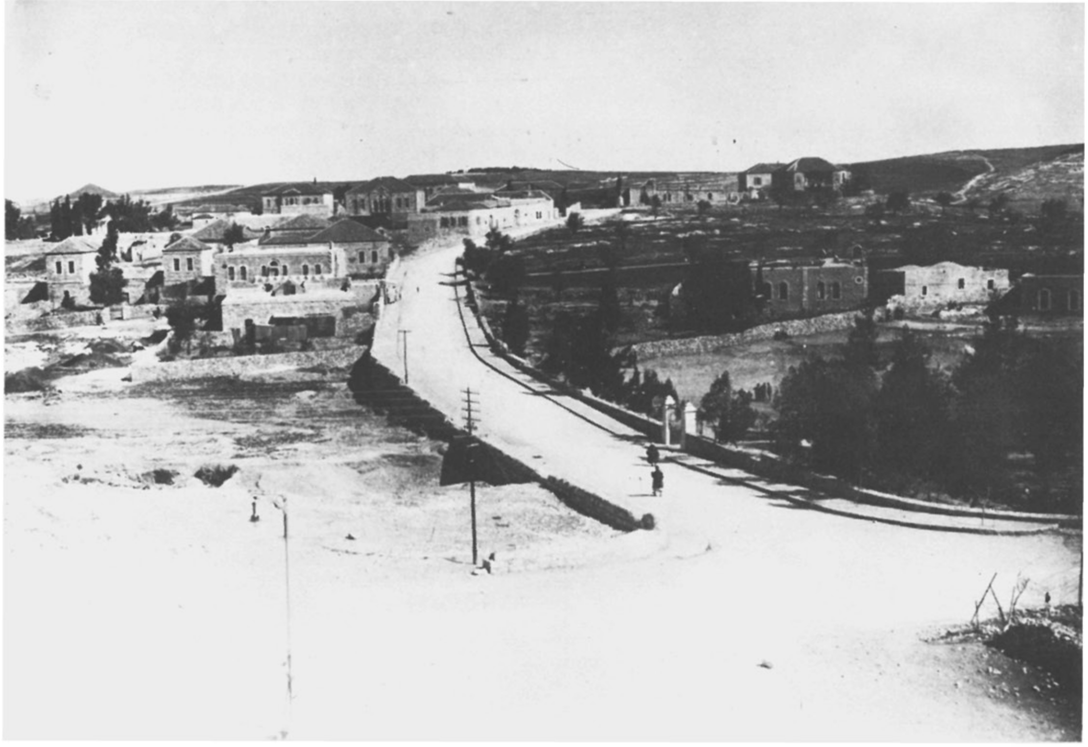

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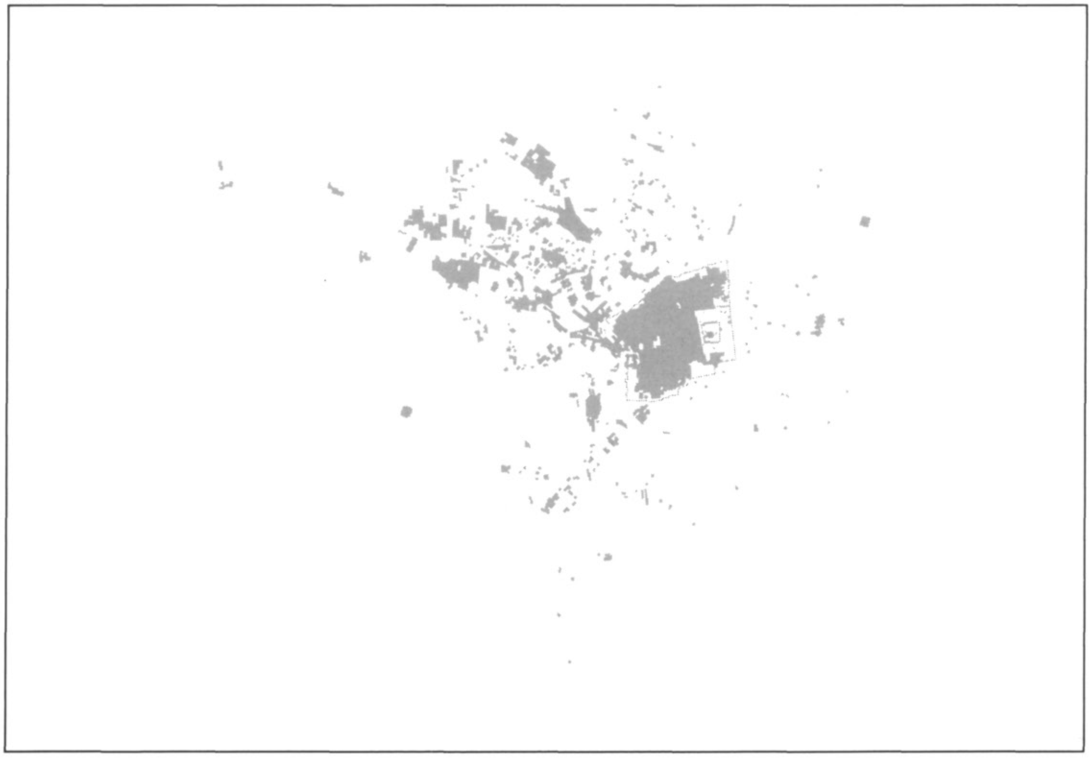

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**1.42** *A view of Salah El Din Street from Herod's Gate, 1924.*

**1.43** *Extent of urbanization by 1948.*

**1.44** *Zion Square, looking toward Ben-Yehuda Street, 1925.*

**1.45** *Ben-Yehuda Street, one of the main shopping streets in the center of the predominantly Jewish business district, 1935.*

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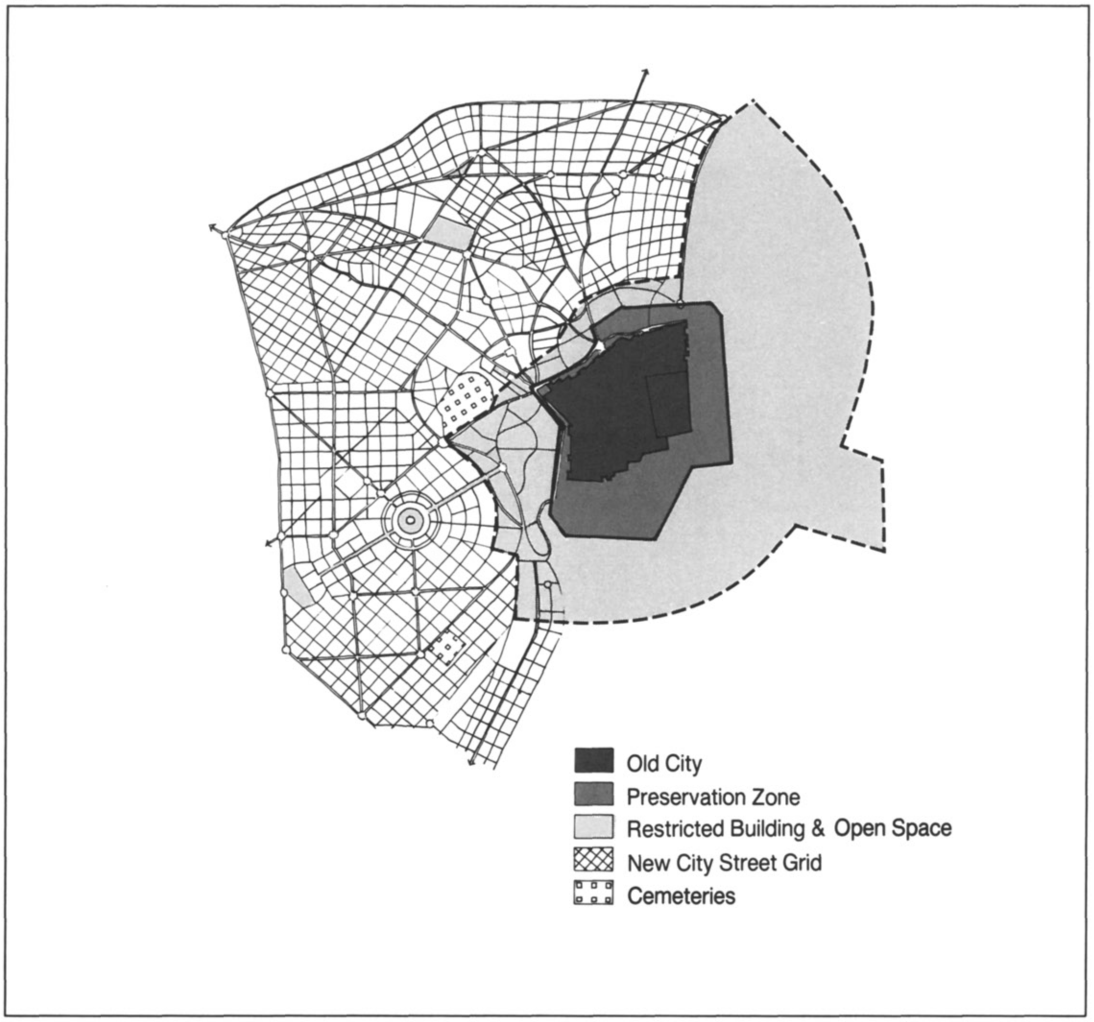

**1.46** *William McLean, city engineer of Alexandria, introduced the formal concept of town planning to Jerusalem through a framework of regulations to protect the medieval character of the Old City. Envisaged as the center around which the new city would revolve, the Old City was isolated by a green belt. The plan divided the area into four zones, where construction could occur if no buildings were placed on the skyline of the Mount of Olives and south of the Old City; buildings were no higher than eleven meters above the ground; buildings were not to be for industrial purposes; buildings would be seen as extensions of the villages or as special buildings north and west of the Old City; and all buildings were built of stone. In addition, a highly regularized street pattern with monumental axes in the northeast and southwest was imposed on the landscape.*

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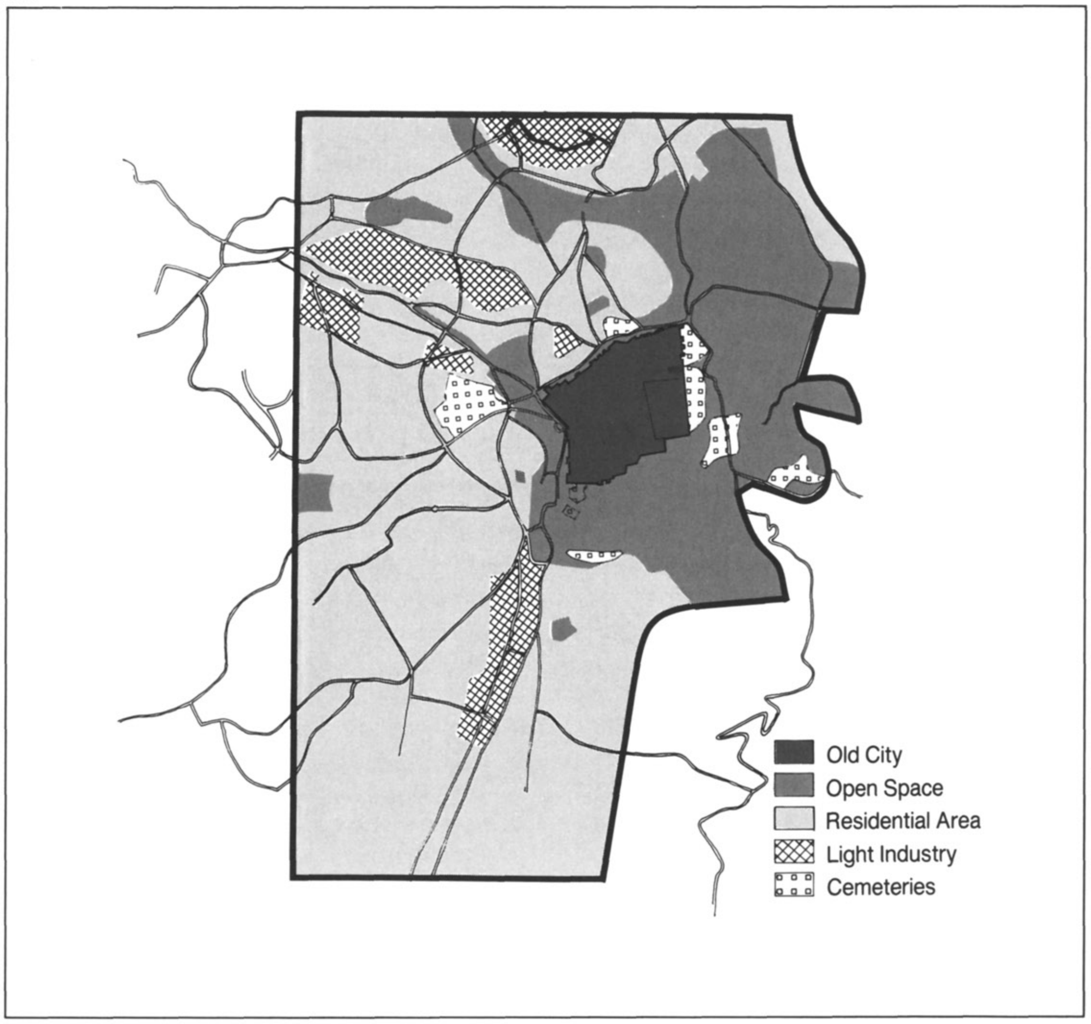

**1.47** *The plan by C.R. Ashbee and Patrick Geddes institutionalized many of McLean's concepts. Specific laws were adopted to regulate the use of land as the city was divided into four clearly defined zoning districts: the Old City; open spaces and parks surrounding the Old City and the Mount of Olives; combined residential, business and institutional zones; and one of three industrial areas. Proposed roadways more closely followed the contours of the land, and open spaces were more integrated with development to define the limits of the city.*

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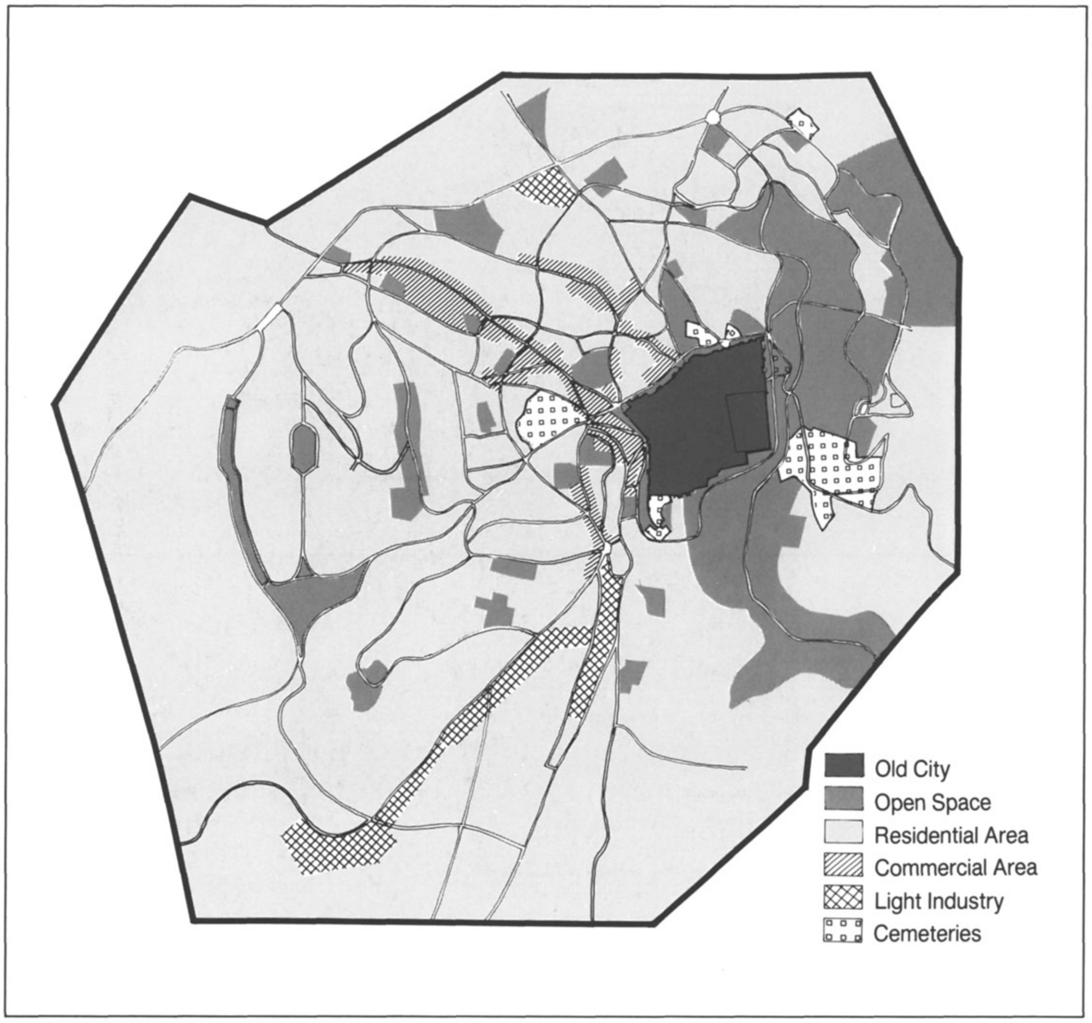

**1.48** *In Clifford Holliday's plan, the growing needs of the Jewish and Arab communities within the city became the basis for regulatory controls, since the built-up area was now sixteen times the size of the Old City. The city was divided into well-defined residential, commercial, and industrial zones reflecting previous concepts. Building restrictions in the Old City and the Mount of Olives were maintained, the green belt around the Old City was increased, and controls were initiated to keep the skyline of the city parallel to the natural contours. Roadways were divided into three categories to support increasing service needs, and Jaffa Road was designated as the focus of future commercial development.*

**1.49** *Henry Kendall refined the previous plans with a primary emphasis on housing. Six housing zones were delineated, and strong criteria were developed for public housing projects. The plan distributed employment areas throughout the city with extensive zones for industry in the southwest, north, and along the western end of Jaffa Road. The plan also reduced the amount of open space but designated the valleys as continuous open spaces interlaced with built-up areas along the crestline and as partitions between Jewish and Arab areas.*

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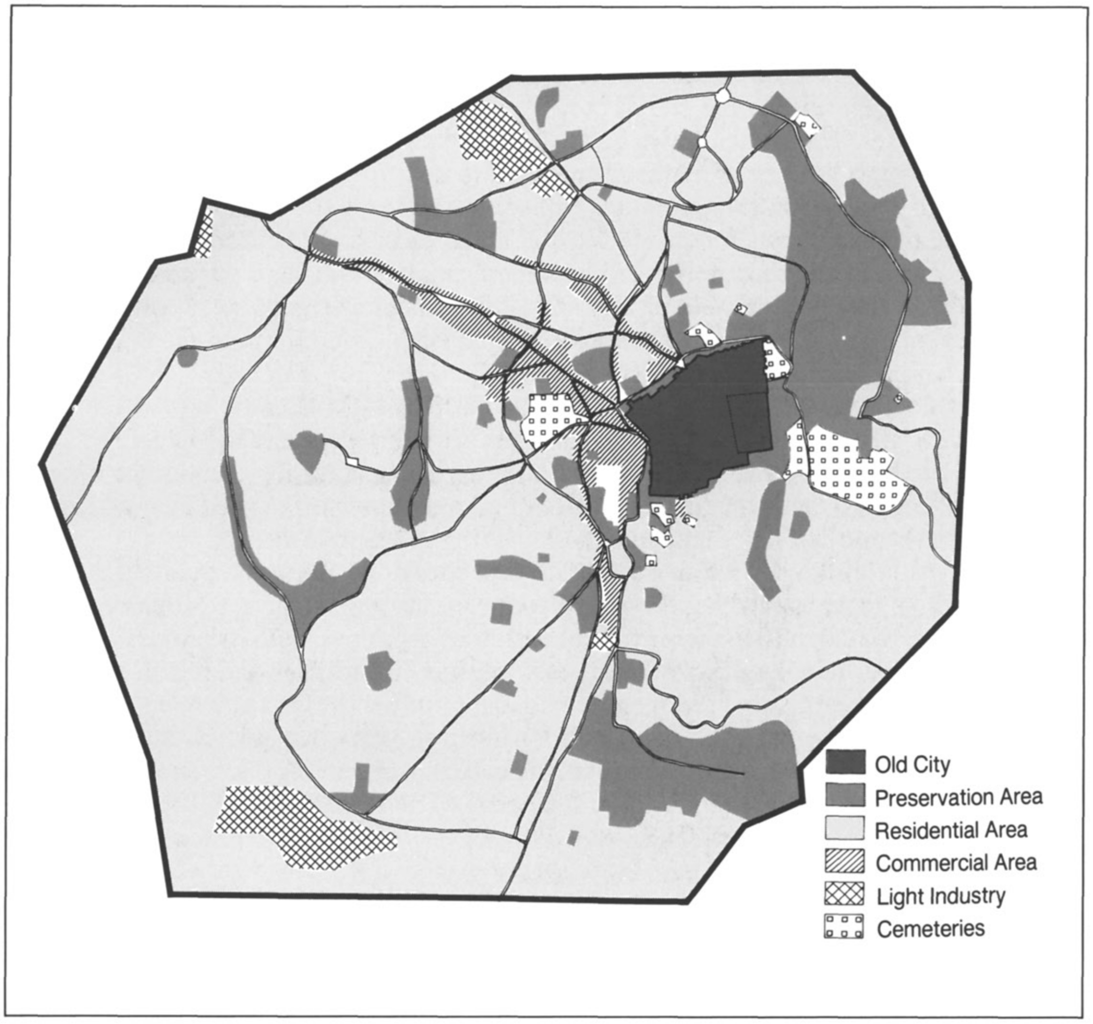

## THE DIVIDED CITY

The armistice agreement following the 1948 war (known in Israel as the War of Independence) left the city divided, since at the end of hostilities major parts of it were held by both Israel and the Jordanians. The border drawn was to become known as the "green line"; it traversed the city in the most accidental manner, unrelated to any functional distribution of uses or roads. Thus, to the south, the border split the village of Abu Tor in two and extended northward along the old city walls, which remained in Jordanian control. The border then turned east just next to city hall and then northward between Damascus Gate and the neighborhood of Musrara. Jaffa Road, Suleiman Road, and many other major arteries were simply cut in two, with barbed wire and concrete walls marking the division. In addition to the border itself, certain areas were demarcated as "no-man's-lands."

The fighting resulted in considerable destruction. The most devastating was the virtual destruction of all the public buildings in the Jewish quarter within the Old City. These buildings were not destroyed in battle but rather were systematically demolished after the Jewish quarter fell to the Jordanian army. Buildings were damaged outside the walls as well, such as Notre-Dame de France and other buildings in the Mamilla district.

The division of the city led to bizarre physical situations. Since the main road leading from Bethlehem to Jerusalem was divided between Jordan and Israel, the Jordanians had to create a detour coming into the city from the east. Mount Scopus, with its university and the Hadassah hospital, remained in Israeli control but was cut off from the rest of the Israeli-controlled city. The armistice agreement provided for limited convoys and no regular access, with the result that the facilities sat unused for nineteen years. Jerusalem's downtown was along Jaffa Road. That whole area came under Israeli control, leaving the Arab sector without a commercial center. An alternate section soon evolved along Salah el Din Road adjacent to Herod's Gate. Jaffa Gate, which had formed one of the two principal entrances to the Old City, sat deserted and unused because the roads leading into it from the west were under Israeli control. Similarly, many areas that formerly had thrived because of their central location found themselves at the edge of a "no-man's-land" and were rapidly deteriorating into slums.

Living by the border was dangerous. Sniping and shooting were not unusual, and there was always the danger of hostilities erupting. Passage from one half of the city to the other was limited to United Nations diplomats and a few others. So tight and hermetic was the seal between the two halves that the populations of each side grew up knowing nothing of what was going on behind the dividing walls.

The years of division, 1948 to 1967, were a period of major development and change in western Jerusalem. The rate of growth was much slower on the Jordanian side, where the period was marked by economic stagnation. At that time Jordan's priority was the development of Amman, its capital; Jerusalem was treated as a stepchild. Tourism was limited because of the division of the city and the difficulty of access, and therefore development was modest. Most of the Arab development extended along the route to Ramallah, forming an affluent strip with suburban-like sprawl.

On the Israeli side, things were quite different. The rate of development was substantial. Israel declared Jerusalem its capital and proceeded to build the necessary public buildings, including the Knesset, Israel's parliament, and the buildings for the government ministries in a new government compound located west of the Valley of the Cross. Next to it was built a new campus for the Hebrew University, whose old campus was cut off on Mount Scopus, and a new, extensive structure for the Israel Museum. These were the years of mass migration into

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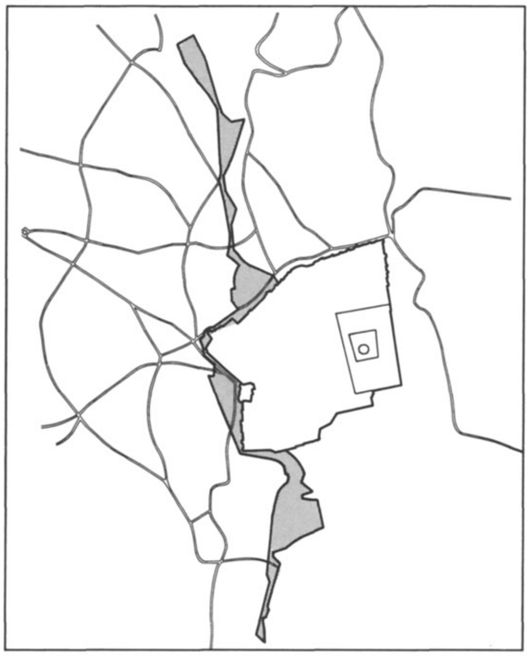

**1.50** *The dividing line between west and east Jerusalem after the cease-fire agreement between Israel and Jordan.*

**1.51** *Barbed wire along a fortified zone in the Jewish business sector in the latter days of the British mandate, 1948.*

Israel, and a substantial portion of the arriving immigrants settled in Jerusalem. Several new neighborhoods were constructed, including Romema, the Katamons, and Kiryat Yovel.

Housing for immigrants in the 1950s was the last word in expediency. All families — whether with three, four, or even ten children — received a standard size apartment, measuring 650 square feet. The great pressure to move immigrants from the temporary camps also resulted in many compromised design standards. The "build with stone" law was overlooked; permits were given to the Ministry of Housing to construct buildings in concrete or stucco. Neighborhoods of the 1950s became caricatures of housing projects, with standardized, repetitive units. They were identical to the ones being built in Tel Aviv or Haifa, with little consideration for Jerusalem's unique topography and character. The settlement of the immigrants resulted, perhaps accidentally, in great concentrations of particular ethnic groups. Certain areas were settled almost exclusively by North Africans, mostly Moroccan Jews, and others by Rumanian, Bukharian, and other populations. This only reinforced Jerusalem's ancient pattern of a mosaic of clearly defined, homogeneous sectors, each a world unto itself. It was a pattern that continued into the 1960s.

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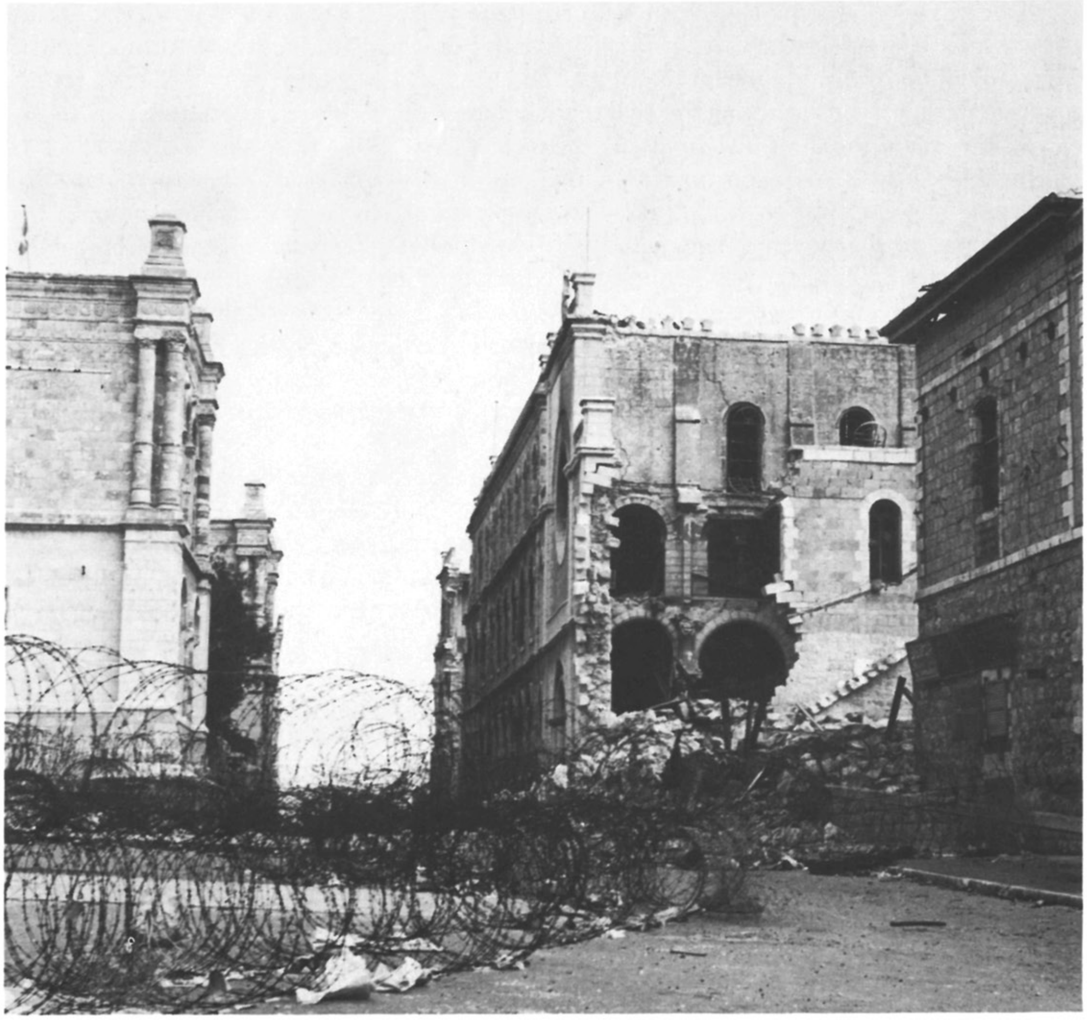

## A UNIFIED CITY: A TURMOIL OF CHANGE

The Six Day War of 1967 could have easily left Jerusalem a divided city. Messages from the Israelis to Jordan's King Hussein pleaded for him to hold the cease-fire; the promise was that if Jordan stayed out of the fighting, no hostilities would be initiated by the Israelis. But the messages were unheeded, and the Jordanian army was once again on the attack. Hussein had obviously misjudged the situation. After fierce battles the entire city came under Israeli control.

It is difficult to imagine the enormity of the changes that resulted from unification. Streets that were previously dead ends became major thoroughfares. Abandoned gates teemed with activity; Jaffa Gate was once again the major pilgrim and tourist entrance to the Old City. The people of each half of the divided city poured into unfamiliar neighborhoods, markets, and shopping streets to explore the unknown. A major tourist boom attracted Christian pilgrims and Jews from around the world, as well as Israeli tourists. The unified city became a boom town overnight, teeming with activity, investment, construction, renovation, and restoration.

During the years of division, both the Jordanian and Israeli halves were culs-de-sac. Roads coming into them led nowhere. As in all isolated cities, they had little activity or through traffic. The unification of the city meant that it was no longer a dead end; it possessed once more a major hinterland, thus sparking the economic boom of the 1970s. The resulting growth and expansion manifested itself in two distinct ways. One was the "organic" type of growth — growth shaped primarily by market forces — that every city experiences with expansion; the other was growth initiated and implemented by the central government.

Comparing the development patterns of government-sponsored construction to that which occurred simultaneously in the Arab community reveals the cultural and economic differences between the two communities. On the Israeli side, construction is public and of enormous scale, with whole sectors of cities designed by a single architect. Arab development, on the other hand, is small-scale and piecemeal. The largest construction is initiated by a family or perhaps a small group of buildings by a developer, and the design of individual buildings is highly differentiated.

As in recent government housing where the street ceases to be the generator of public activity, so in Arab development the street plays a minor role. Development begins along principal routes, such as the Ramallah Road, but as the first layer of lots fronting on the street is built up, new structures are built behind the first layer and, in time, further and further back. Such development is not ordered by public streets with pavement and sewers, but is the result of private negotiations and agreements by landowners in the area. Thus the provision of services, removal of garbage, sewer and water lines, and so on are an administrator's nightmare. Without the public rights-of-way we are accustomed to, each move by the municipality becomes socially and politically charged.

Densities vary greatly depending on the pattern of settlement. For example, government-built housing ranges from 7 to 12 family units to the dunam (or 28 to 48 per hectare). On the Arab side, the single-family house in its diverse forms is the predominant building type. Densities, except within the Old City, are substantially lower. The relatively rural life-style of the Arab population still living in extended-family compounds generates substantially lower densities than the more westernized life-style on the Israeli side. These patterns should not be taken for granted, however; the students discovered as they talked to residents that it is the Arab low-density pattern that the Israeli most desires: his dream is to have his own house on

**1.52** *The dividing wall between east and west Jerusalem in Mamilla Street is falling down, June 1967.*

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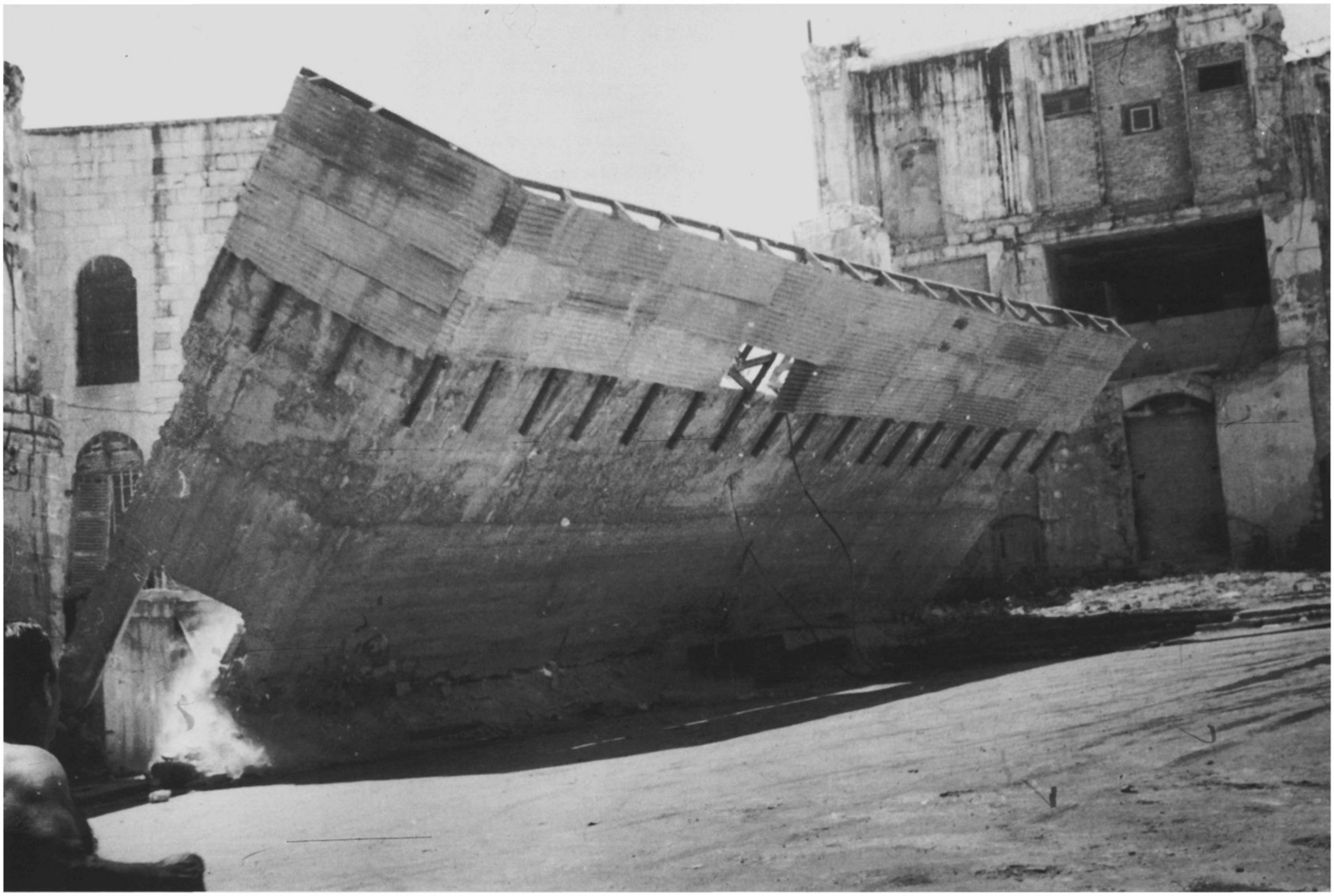

its own lot. To some extent, the reverse was true too: at least for the young and rapidly westernizing Arabs, apartment living, already a familiar scene in Amman, Beirut, and Cairo, is a not undesirable commodity.

Much of the growth and construction accommodating the Jewish population was not organic. It was initiated and implemented by the central government bureaucracy — that is, followed a set of procedures governed by objectives very different from those of market forces. Two primary issues have shaped the strategy of Israeli planners and politicians. The first is to aim at policies that would keep the ratio of Jewish to non-Jewish population constant, at approximately 2.8 to 1, as it was at the time when the city was united. Since the economic boom involved to a great extent service industries, particularly tourism and hotels, and construction, and since these two sectors were dominated by Arab labor, the boom brought an influx of Arabs from the entire region. In order to keep the ratio constant, a proportional increase of the Jewish population was sought. The easiest action, and one well within government control, was to begin moving national ministries from Tel Aviv to Jerusalem. Thus the employees of entire ministries such as housing, agriculture, and justice were moved to Jerusalem. The second issue was to create incentives for attracting industries and other businesses to Jerusalem. An elaborate system of subsidies and other incentives was established, only to prove ineffective since most often the industries created through these subsidies attracted primarily Arab labor.

The dominant objective in development policies for Jerusalem was to prevent a recurrence of the division of the city. At the time of the signing of the 1948 armistice agreement, the "green line" was drawn between those parts of the city occupied by Jordan and those by Israel. The nineteen years of division brought about the consolidation of this border, so that all neighborhoods and communities on one side of the line were exclusively Arab and all those on the other exclusively Israeli. Politicians recognized that any future negotiations over the fate of the city could easily lead to someone proposing that the border be reinstated, thus once again dividing the Arab and Israeli communities. They concluded that the most effective way to prevent the drawing of such a border would be to construct a series of new Israeli-populated neighborhoods, geographically dispersed in such a manner as to bring about a juxtaposition of Jewish and Arab settlements.

The first move toward implementing these policies was the construction of two neighborhoods on land that had been held by Jordan but was immediately adjacent to older Jewish neighborhoods — Ramat Eshkol and French Hill north of Mount Scopus. It was felt that this action would prevent the isolation of Mount Scopus that had existed in the nineteen years of division. To consolidate this area, the Hebrew University embarked on a massive construction program for a major campus on Mount Scopus, which incorporated the old campus buildings of the 1930s. Hadassah also restored and expanded the hospital designed in the 1930s by Eric Mendelsohn.

These policies were given wider scope, and by 1972 several new neighborhoods were under construction. These included East Talpiot, adjacent to the Arab village of Sur Bahir to the south of the Old City, and Gilo, even further south and adjacent to the Bethlehem Road. To the north, Ramot was being built along the ancient route passing by Nebi Samuel. The neighborhood of Naveh Ya'akov, adjacent to the Jerusalem airport, formed the northern edge of the city. These neighborhoods were eventually to accommodate a population of approximately 108,000. The measure of the intensity of construction and the success of the program from the point of view of government planners was that by 1980, approximately 26,000 people were already living in these neighborhoods.

**1.53** *Typical strip development on the eastern side of Jerusalem.*

**1.54** *Construction of Kiryat Yovel housing project.*

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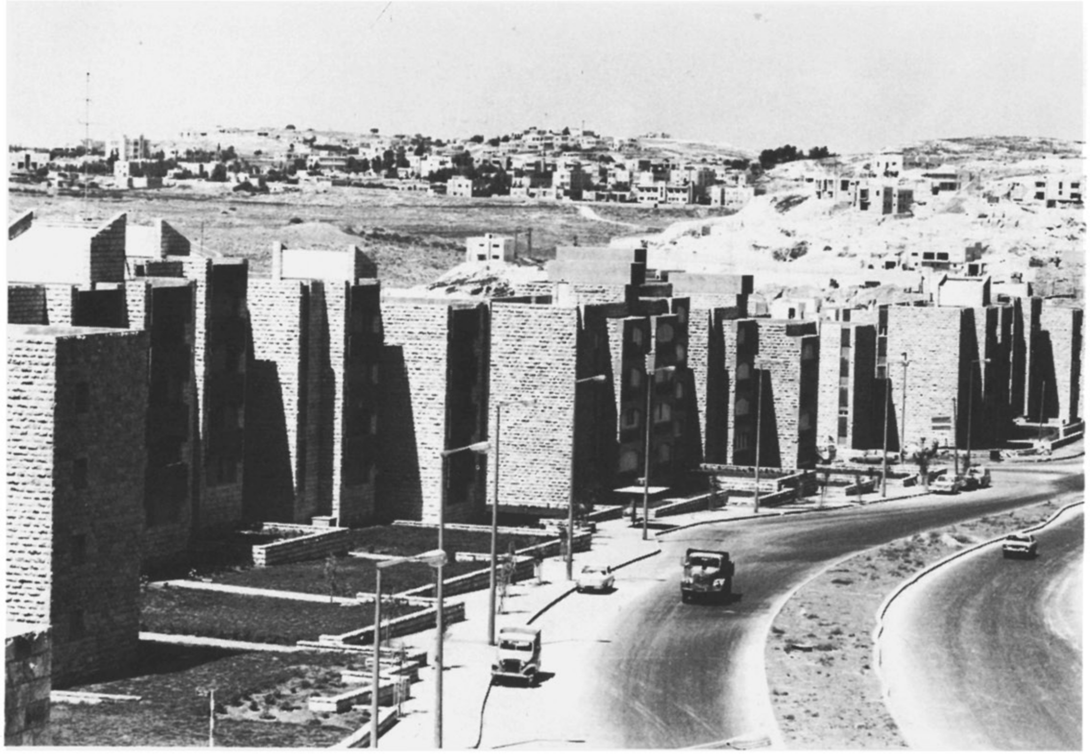

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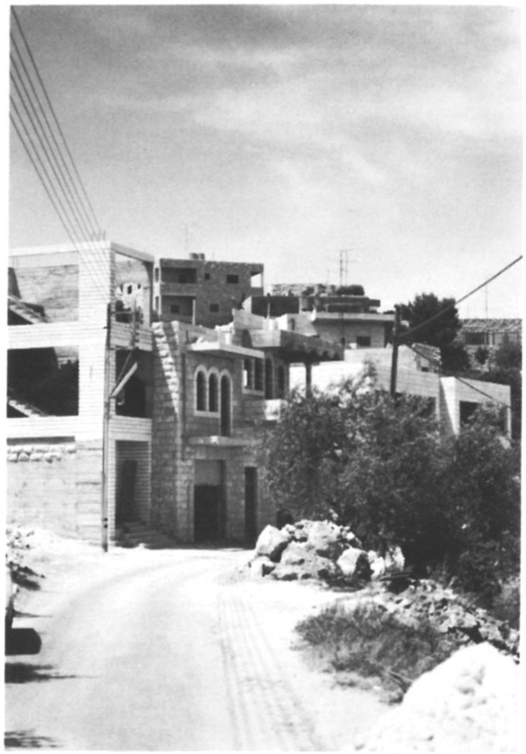

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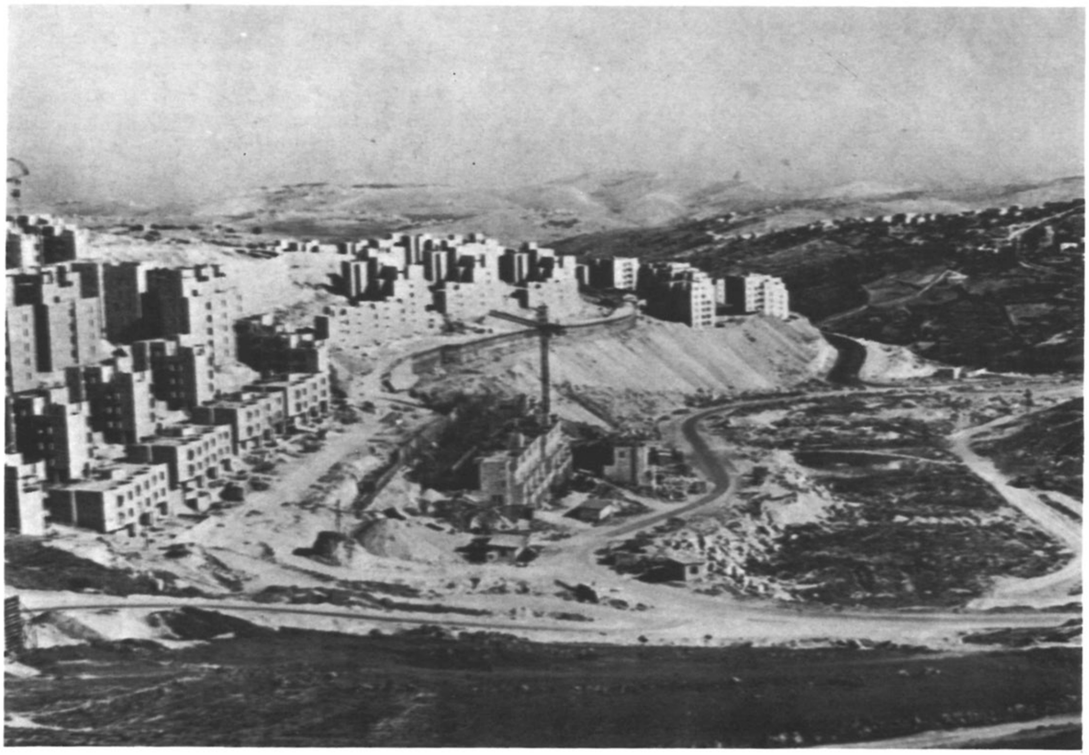

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**1.55** *Ramot Eshkol, one of the first new Israeli neighborhoods built after 1967, east of the 1949 armistice line. On the hill behind is the Arab village of Shuafat.*

**1.56** *Construction in 1972 of East Talpiot, one of four new neighborhoods planned for each of the geographic quadrants of the city. (Courtesy Ram Erde)*

**1.57** *Arab expansion in villages within the municipal boundaries of Jerusalem.*

**1.58** *New roads to accommodate the increase in traffic.*

**1.59** *Extent of urbanization by 1967.*

**1.60** *Extent of urbanization by 1980.*

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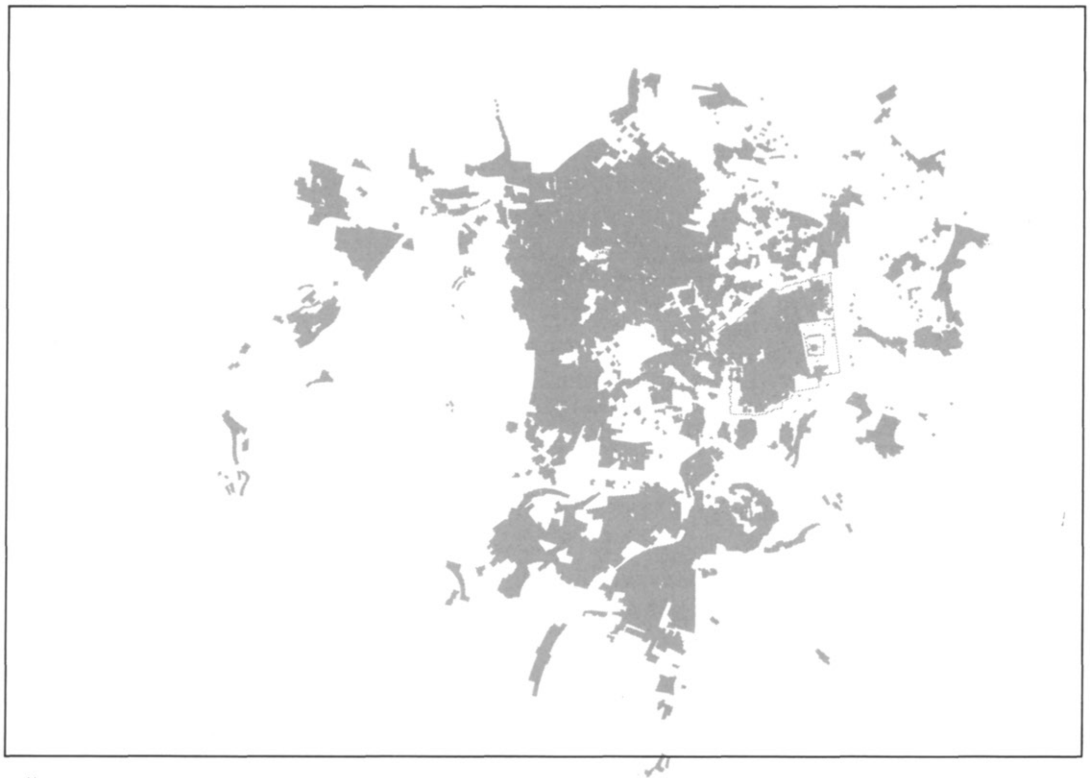

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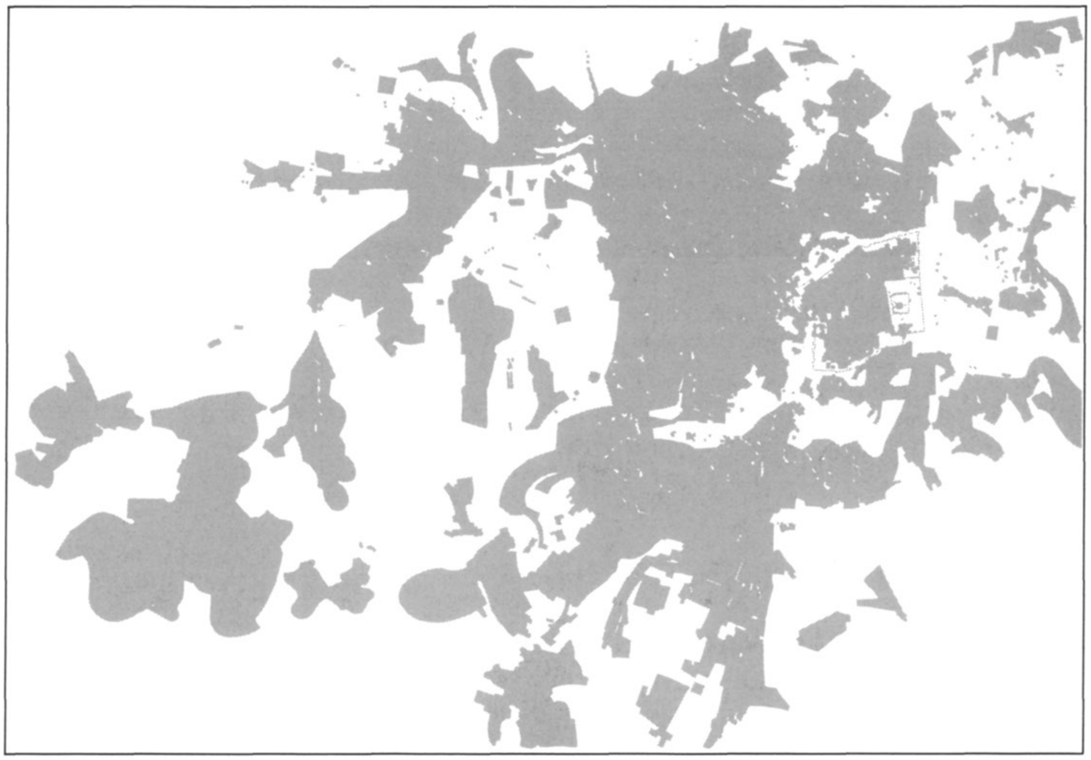

Since Arab and Jewish neighborhoods had been separated by the 1948 border, it was obvious that the strategy of dispersal could only be implemented by acquiring land in the heretofore Jordanian-administered areas. Thus a survey was initiated to identify land that was neither cultivated nor inhabited by Arabs. Some of this unused land turned out to be owned by the Jordanian government and some privately owned by Arabs. In either case, the land was expropriated (known in the United States as condemned) for development by the government. Simultaneously, the metropolitan boundaries were redefined. A new city border was adopted, extending all the way north toward Ramallah in order to incorporate the Jerusalem airport and south to incorporate Gilo but not Bethlehem. One June 28, 1967, the entire area was annexed as part of Israel.[1]

For the Harvard faculty and students arriving on the scene in 1980, the urbanization pattern was unusual, if not bizarre and confusing. In almost every city it is possible to trace some system of logic or market forces that could explain how the patterns of development evolved. Proximity to the central business district and access to transportation are two elements that generally influence the location of development. In countries where centralized planning is practiced, the location of satellite cities can be traced to public policy aiming at dispersal and decongestion, as can be observed in London, Stockholm, and many Dutch cities. Centralized planning attempts to consider proximity to jobs, establishing new neighborhoods around transportation spines, suitability of the terrain, availability of natural amenities, and so on.

None of this is true in Jerusalem. Neither convenience nor access nor proximity to jobs nor natural amenities had anything to do with establishing the location for these new towns. Rather, the sole consideration was the availability and location of undeveloped land and its relation to the objectives of creating a checkerboard mixture of populations. All other issues had to be resolved, all consequences somehow accommodated. The students observed that often the satellite town was connected to the city proper by a fragile, inadequate road. Steeply sloping land was used in spite of the economic repercussions. The neighborhoods were disconnected from each other, making it difficult to provide city-wide community facilities such as shopping, secondary schools, and technical schools. Trips to work and to downtown heavily loaded the road system. The resistance of the population to living in this relative isolation was overcome by subsidized housing in these neighborhoods, which was substantially cheaper than housing in older neighborhoods. Furthermore, all resources, financing, and construction capacity initiated by the Ministry of Housing were singularly directed toward the new neighborhoods in the annexed land area.

The students easily identified diverse patterns of development in various parts of the city. On the one hand, there was the deterministic, geometric layout of the new neighborhoods designed by the architects for the housing ministry; in contrast, there was the haphazard sprawl of Arab development along the major arteries.

## CHANGING DEVELOPMENT PATTERNS

It is customary for those embarking on urban design and planning studies for a particular city to explore in depth the prevailing patterns that generated building form. Consider the task facing a group of faculty and students exploring development patterns in Boston. They would recognize rather rapidly the existence of certain archetypal building types, each with a

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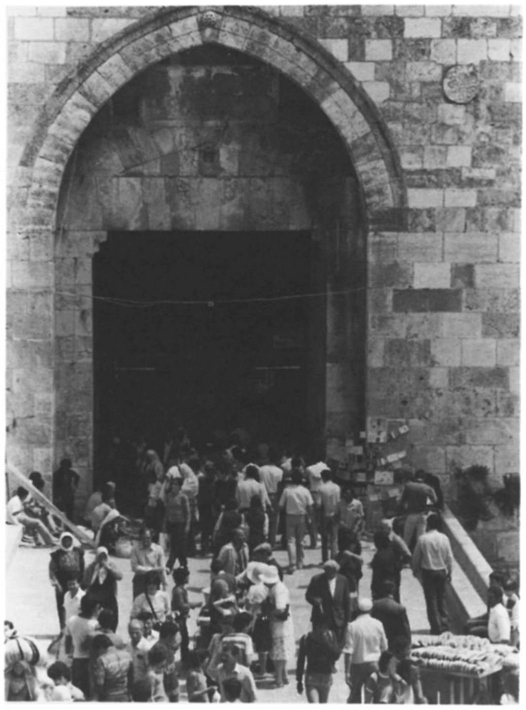


**1.61** *Since the unification of the city, tourism has dramatically increased. The magnitude of tourism has become a great challenge to the city as well as a threatening force of a kind never known before.*

**1.62** *With the reunification of the city, Damascus Gate resumed its significant role as a major entry to the Old City from the north.*

particular scale and mode of land development. There is Beacon Hill, with its random street patterns adapted to the topography with small-scale three- and four-story structures. There is the contrast of the Back Bay, a grid-like plan of four-story attached houses served front and back by streets and alleys and with ornate facades with bay windows and elaborate dormers. There is a multitude of other town-house developments throughout the city; these vary in scale from houses fifteen to perhaps thirty-five feet wide, from streets twenty feet wide to those sixty or a hundred feet wide. Different patterns would be found in Cambridge, Somerville, Charlestown, and South Boston. There is also the typical suburban development. Densities range from perhaps six units to the acre to areas where there is only one house per acre or even one per two acres.

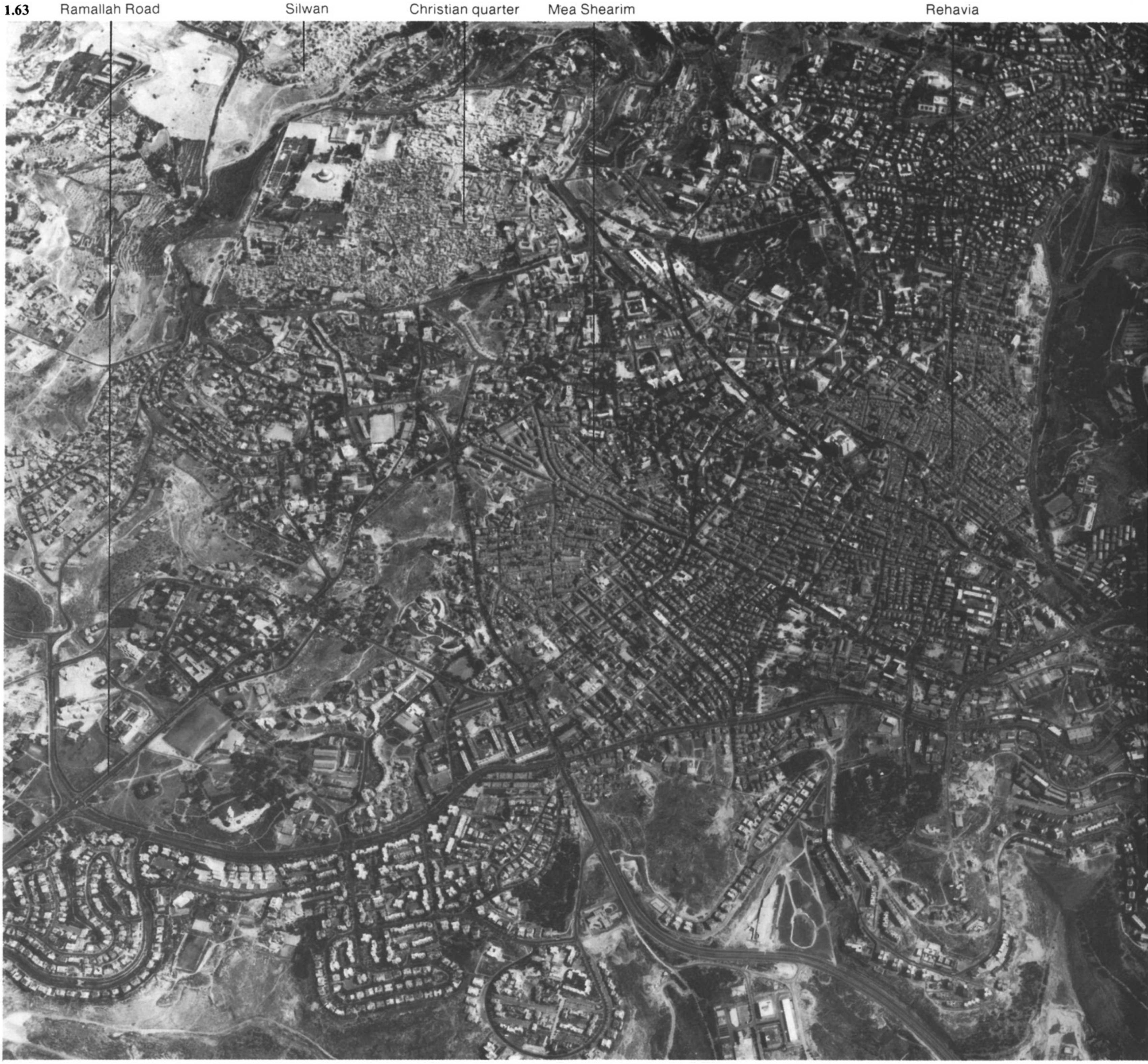
Patterns differ depending on the period of construction and location in the region. A study of an aerial photograph would reveal the simplistic volumes of public housing built in the 1950s, and with slight variation similar projects built by the private sector in the same period, such as the West End. In examining an aerial photograph of Boston, even the untrained eye would recognize the changing patterns of commercial and industrial development. The tightly knit shopping streets of the Downtown Crossing could easily be contrasted with regional shopping centers surrounded by acres of parking. The difficulty of making any sense out of these observations in a city such as Boston would arise from the fact that diverse patterns occur in different parts of the city that were built at different times. Explaining why such diverse patterns evolved would require a complex socioeconomic study were it not for one major factor: the impact of the automobile on development patterns.

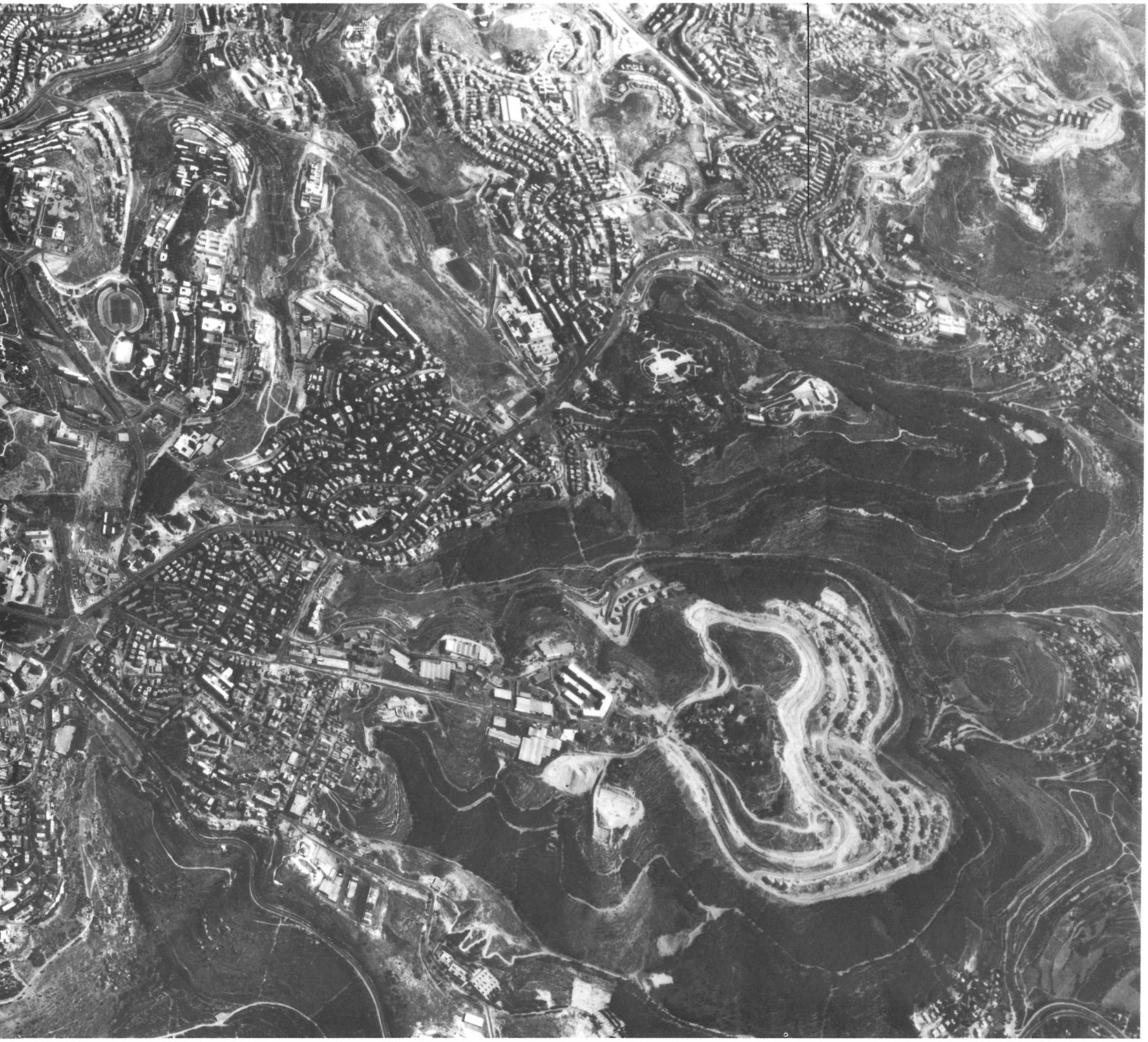
In contrast, students arriving in Jerusalem soon discovered that studying patterns of development gave them a key to the period in which a certain development took place and the particular community that was responsible for it. Thus, as the first task in familiarization, the students were asked to record these observations. The city was divided into sections so that each group could conduct an in-depth examination of a specific area; the groups then met, compared notes, and shared the knowledge of their area. Even within the Old City, students found that differences could be observed among the patterns of the Armenian, Christian, and Muslim quarters. Once outside the wall, several patterns could be seen in the neighborhoods built at the turn of the century. Mea Shearim had an East European compound-like definition. The villages of Silwan and El Azaria had small building masses and closely followed the natural topography. In Yemin Moshe, train-like rows of town houses stepped up with the terrain.

The Garden City patterns of the 1930s have already been described, and after 1948 the Ministry of Housing dominated the scene. In the 1950s, as observed in the Katamons and Kiryat Yovel, undifferentiated rows of buildings were erected, often without regard to topography. In the 1960s the patterns changed. Even the satellite towns of the post-1967 era are readily categorized by periods. Ramat Eshkol, the first to be built, follows the patterns developed in Tel Aviv during that period: grid-like streets with parking areas along them and individual apartment buildings, each with its own distinct entrance. Gilo and Ramot, built several years later, demonstrate the latest ideas in separating cars from pedestrians; neighborhood units are designed as clusters instead of in direct relation to the public street. Thus an address is perceived not as an entrance off the public street but as an apartment that has to be identified within a project having its own internal circulation system accessible from the street. The street becomes an artery for traffic leading to the individual projects, an element *separating* clusters of developments rather than connecting them.

**1.63** *Location aerial photograph of comparative neighborhood pattern studies. Eight neighborhoods are compared according to photographs, figure–ground studies showing built form relationship to open space, typical housing clusters, and typical street views.*

**1.63**


Ramallah Road
Silwan
Christian quarter
Mea Shearim
Rehavia


Kiryat Yovel

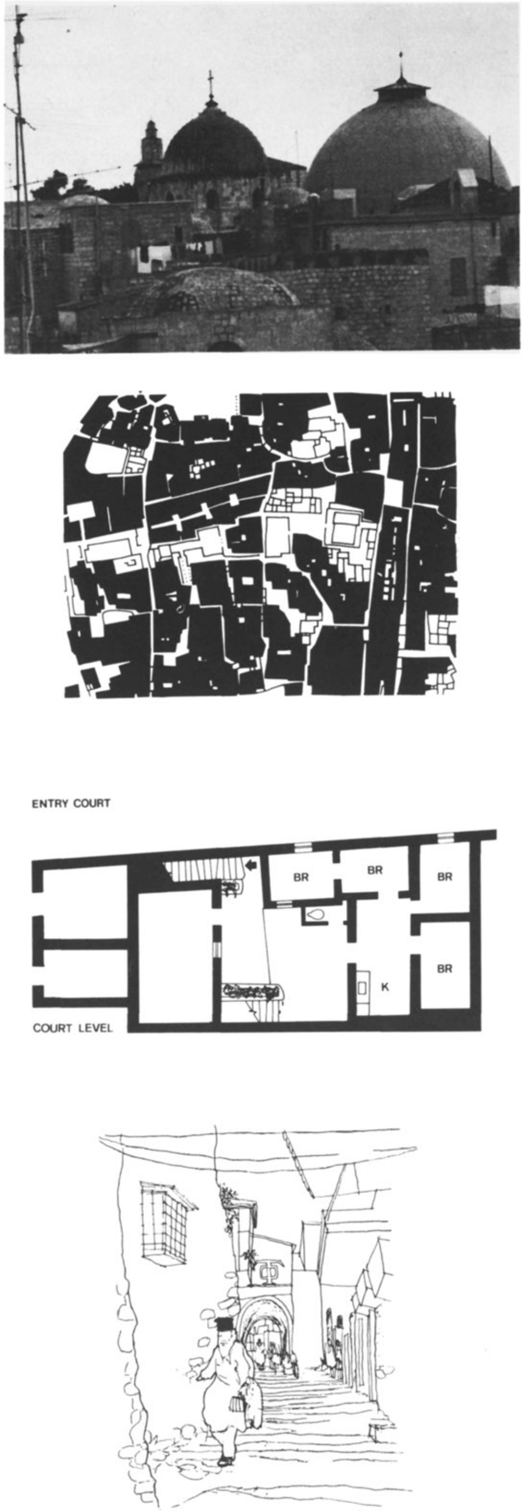
**1.64** *Christian quarter, ca. seventeenth century.*

**1.65** *Mea Shearim, 1874.*

**1.66** *Silwan, ca. nineteenth century.*

**1.67** *Rehavia, 1930s.*

**1.68** *Kiryat Yovel, 1950s.*



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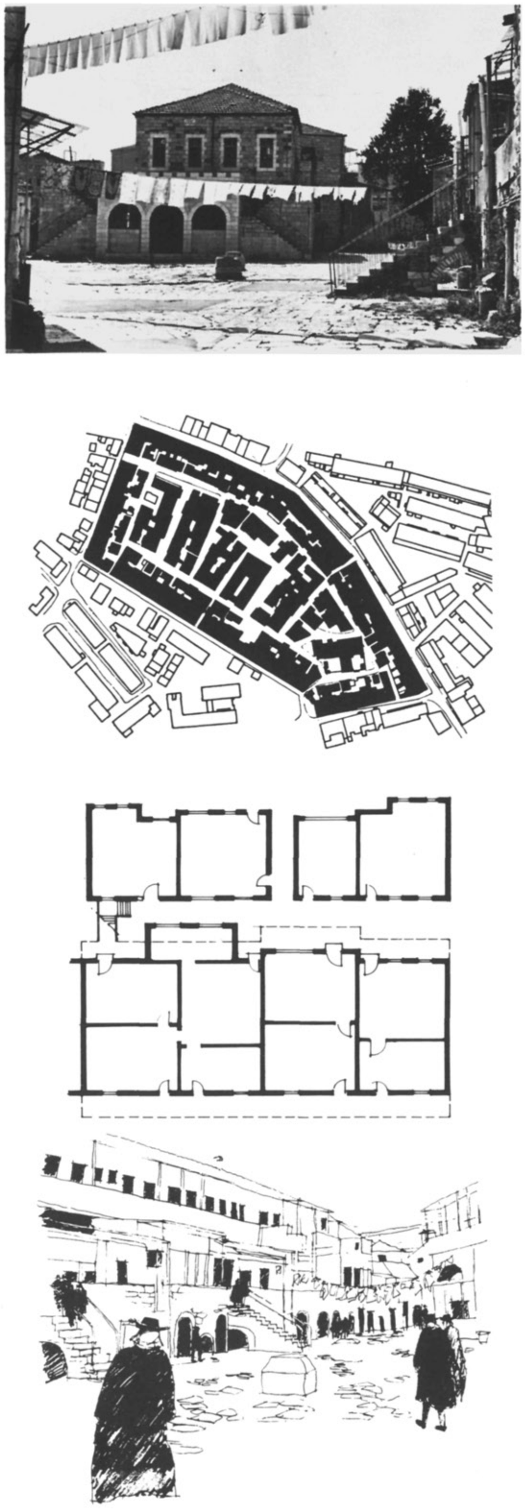

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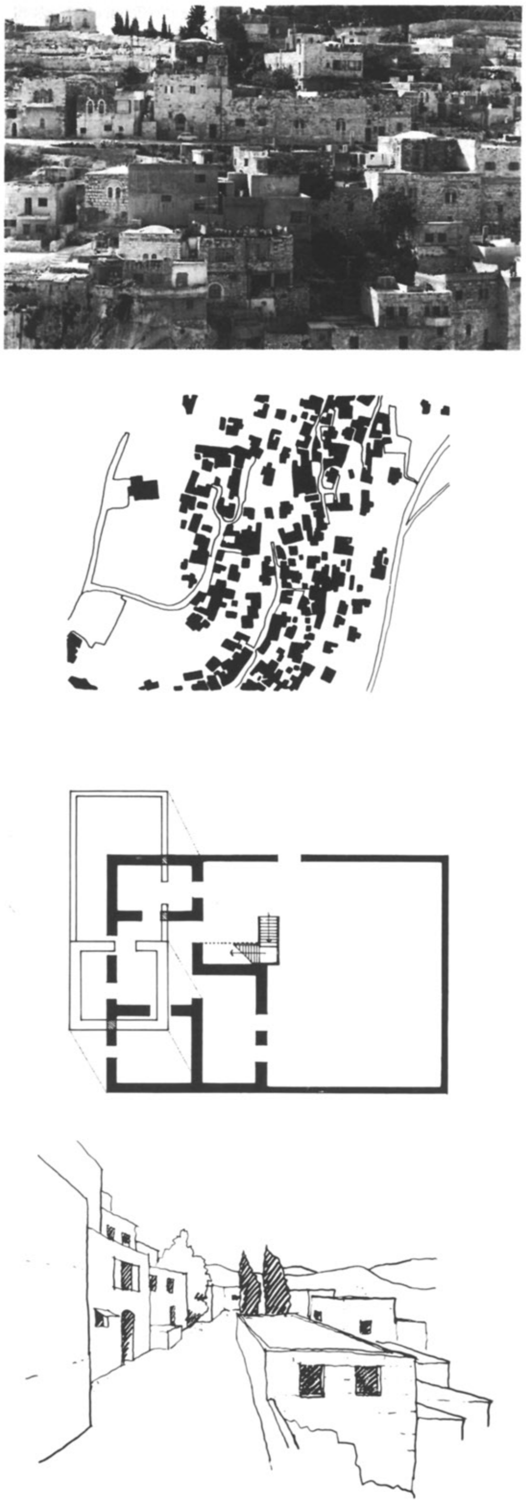

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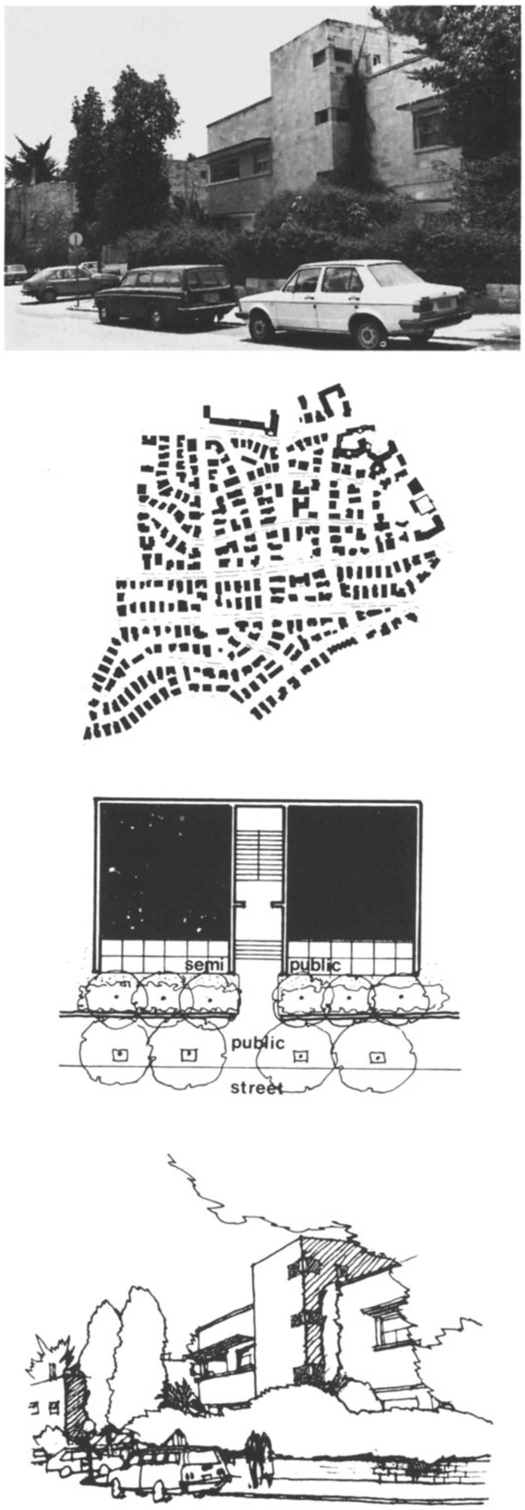

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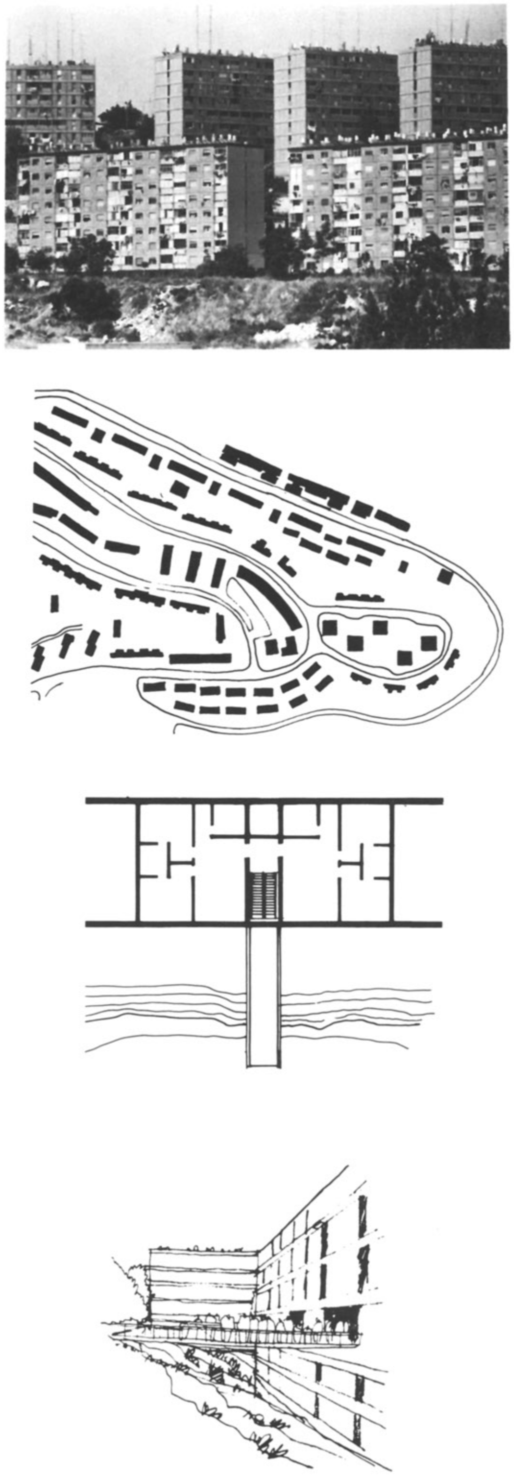

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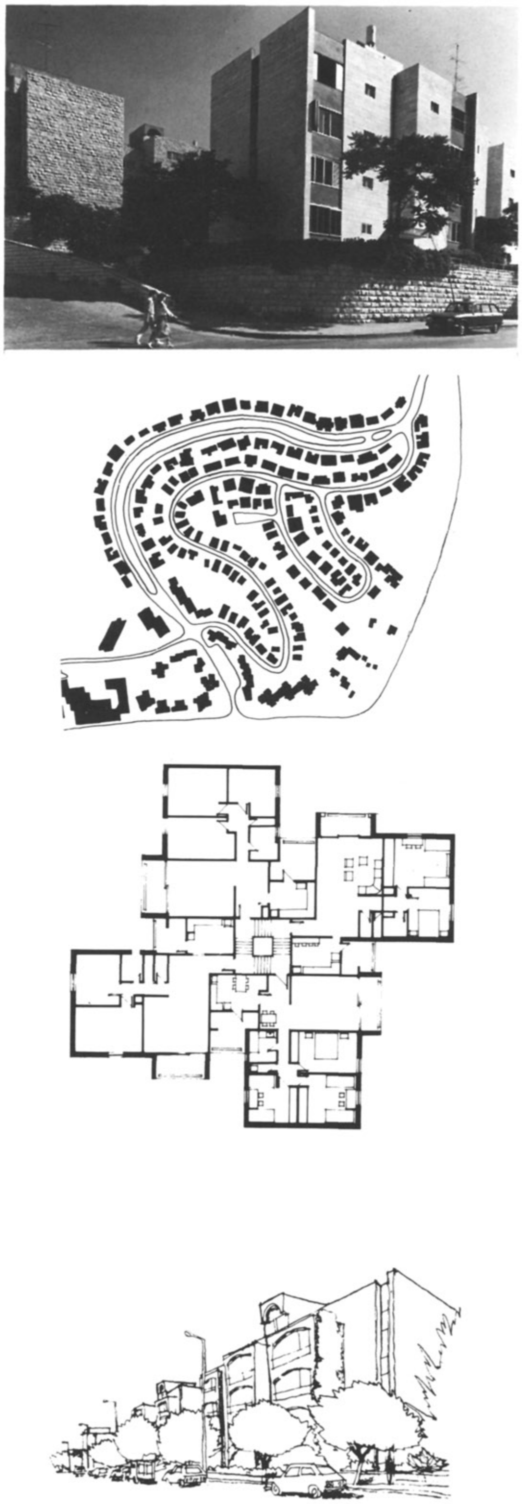

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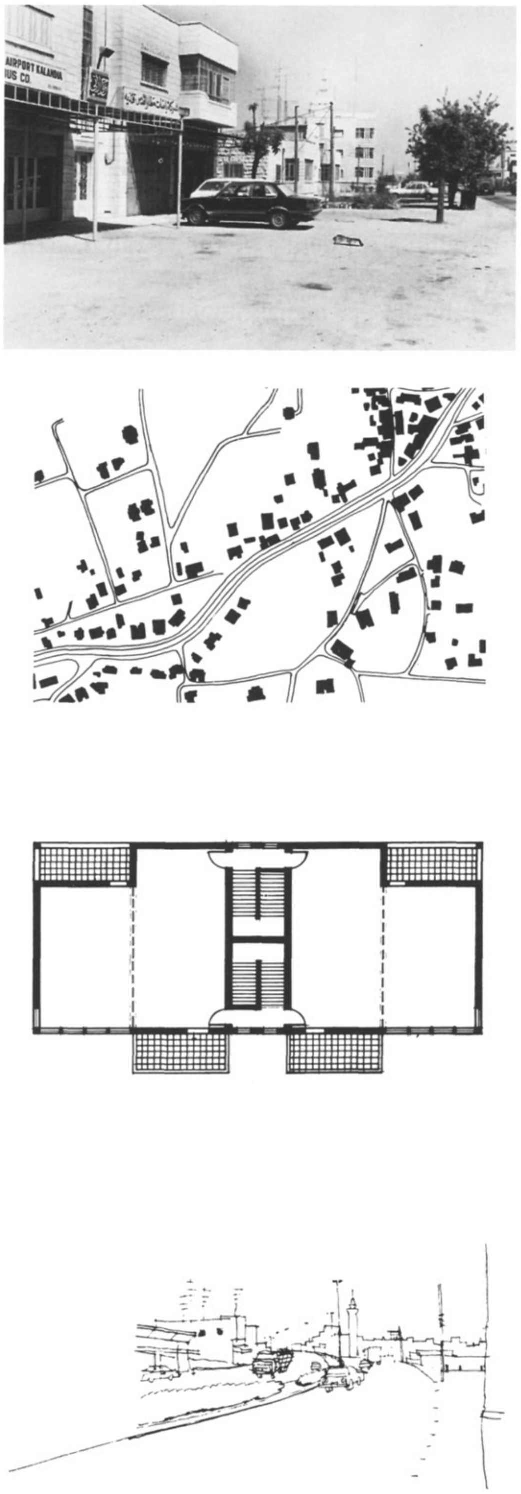

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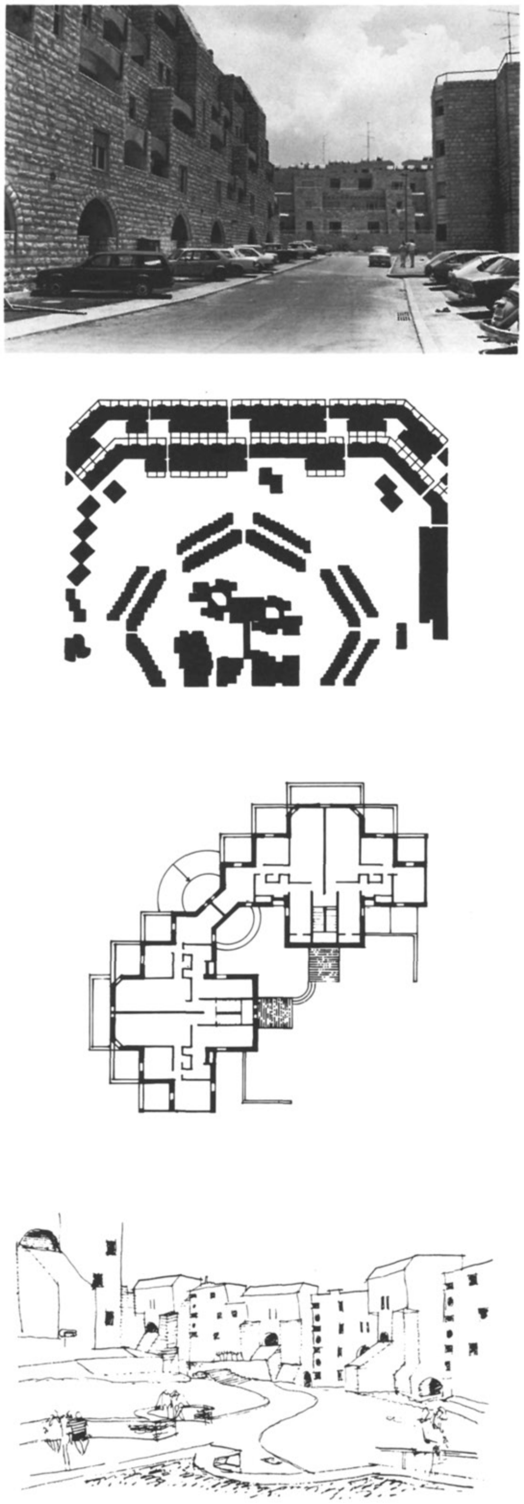

**1.71**

## SUMMARY

This, then, was the context for the study: a historic city rapidly growing and rapidly changing; the Old City facing the pressure of pilgrims and tourists, with tens of thousands of cars and buses crowding at its gates; hotel developers seeking sites to construct facilities for such tourists; shopkeepers growing less and less competitive, complacent in the face of growing demand and shrinking supply; and, last but not least, the changing quality of life for the individual residents, be they Arab or Israeli, building in their villages or constructing a new neighborhood.

Each week brings new construction; each year brings tens of thousands in new population. Arabs and Israelis alike are expanding into land not built upon for centuries. Where should all this expansion take place? Of no less urgency is the question of how it should take place. Faculty and students arriving from abroad were less likely to question the broader overall reasons leading to the growth of Jerusalem. They tended to accept the geopolitical factors and the economic realities that were making Jerusalem grow and change; rather, their attention was directed to the question of how this growth should take place. What building types, what mode of developing the land in each location in relationship to neighboring communities would best meet the needs of the citizens of Jerusalem? Would meeting such needs still result in a Jerusalem that the concerned outsider would conclude was respectful to its heritage? Are the two needs compatible or in conflict? Can one serve the citizenry of Jerusalem and protect it as a world treasure, or is its protection as a world treasure detrimental to the well-being of its citizenry? These are the questions and concerns that the students addressed in a series of specific design explorations touching on every area of the city, ranging from the heart of the Old City and its sacred places to the outlying suburbs and satellite towns and the rural lands that surround Jerusalem.

As the projects became more specific, so did the questions. Should vehicles be allowed into the Old City? What should be the nature and character of new construction within the Old City? What should be done about the thousands of cars and buses that crowd the city gates? Should parks surround the Old City walls, or should there be some form of alternative development? What is the most appropriate use of the vacant lands surrounding the city in the previous no-man's-land? Should the downtown area be centralized, or should there be a dispersal of subcenters? What areas in the metropolitan region should be developed and what should be kept as open space? What should be the character of the edge of the city that meets the desert to the east and forest area to the west? These were just some of the questions that we addressed as we began to study Jerusalem. The answers we found will be discussed in subsequent chapters.

**1.69** *Ramat Eshkol, 1968.*

**1.70** *Ramallah Road strip, 1970s.*

**1.71** *Gilo, 1977.*

2.1

# 2 THE OLD CITY AND ITS VISUAL BASIN

The Old City of Jerusalem sits on a plateau contained by two deep valleys which descend southward, where they meet at the point of a spring, the water source of the city for millennia. In the beginning, the City of David was built on the steep slope coming down toward the spring. Walls built on the east and west sides of the hill against the two valleys gave it adequate protection. In time Solomon built a temple on the top of the hill, overlooking the whole town. After the destruction of the first temple in 586 B.C. and the Babylonian exile, the city was rebuilt in 538 B.C. through a commission granted by Cyrus, King of Persia. A second temple was rebuilt on the same spot. First this was a modest structure, but by the time of the Hasmoneans, the city had expanded and so had the temple. Once the southern slope was built up, the city began expanding west of the Temple Mount. The Hasmoneans built their palace in these new quarters near the present location of Jaffa Gate.

By the time of Herod the city had expanded to encompass David's city, the entire walled city of today, and further land to the north, including the present-day vacant triangle of land in front of Damascus Gate. Since the city had expanded into the so-called upper city, which overlooked the Temple Mount, Herod was faced with a difficult urban design problem. The hill on which Solomon built the temple was a small one. It had once been the highest point in the city, but now the city looked down upon the temple, and the small hill could not accommodate a temple of the scale and magnificence that Herod envisaged. He came up with an ingenious solution: a series of enormous retaining walls measuring up to ninety feet in height (depending on the rock bed level) was constructed on the slopes of the hill. Behind these retaining walls he added a series of vaulted catacombs to minimize the pressure on the walls and placed upon them an enormous platform (approximately 1.5 million square feet), which became the base for Herod's great temple. Grand stairs, bridges, and streets led to the temple from various directions.

The city was vulnerable from the north, where the wall simply separated it from the plateau. The history of conquests after Herod bore out the scriptural prophecy "Out of the north an evil shall break forth" (Jeremiah 1:14). Herod's city was destroyed by Titus in 70 A.D. and rebuilt by Hadrian as a Roman city, Aelia Capitolina. It in turn was conquered by the Byzantines, the Omayyads — the first Muslim conquest — the Crusaders, the Mamelukes, and the Ottomans, who constructed the city within its present walled boundaries. Suleiman the Magnificent rebuilt the city's walls as they exist today; David's city and Mount Zion are not contained within them.

Until the turn of the century the city of Jerusalem was always perceived as compactly perched upon the hill, contained by the valleys, distinct from its surrounding pastoral landscape. Ancient etchings depict Jerusalem rising above the Valley of Kidron as seen from the Mount of Olives or above the Hinnom Valley as viewed from the west. The image of Jerusalem as a jewel in the desert landscape has haunted every planner and architect, past and present.

At the turn of the century, when the city began expanding outside the walls, this image was drastically changed. Distinct definition of the walled city within the landscape was compromised when buildings sprouted and attached themselves to the city wall to the west and north. Since the steep terrain made construction to the east and south exceedingly difficult, the historic image remained intact from these directions. By the time of the arrival of the

2.1 *Viewed from the Hill of Evil Counsel, the Old City sits within a basin formed by the Hinnom Valley on the left, the Kidron Valley in the center, and the Mount of Olives and Mount Scopus on the right.*

British in 1918, the expansion westward and northward had already begun to merge the Old City with the new urban fabric. Holliday, Ashbee, Geddes, and Kendall, the principal planners of Jerusalem under the British mandate, each initiated measures to preserve the Old City and its image. All plans called for an open space and park system surrounding the city walls, but there were neither the resources nor the will to implement this scheme in areas that had already been built up. To the east and south, however, the British succeeded in preventing any new construction, thus stopping any further deterioration and cluttering.

The British carefully policed new construction within the Old City to make sure that the character of new buildings would be compatible with the old. This system prevailed until 1948, when the entire Old City and its environs came under the control of Jordan. The control systems set up by the British broke down, and the Jordanians permitted, or at least tolerated, construction in David's city to the south and on the slopes of the Mount of Olives to the west, including the officially sanctioned Intercontinental Hotel on the crest of the Mount of Olives. Thus the biblical image of the city set in open landscape had been irreversibly altered.

With the unification of the city in 1967, Mayor Kollek resurrected the ambitious plans to clear all construction attached to the outside of the walls and succeeded where the British had failed in creating a system of parks around the Old City. With the use of funds primarily raised from private donors through the Jerusalem Foundation, as well as public funds, all buildings attached to the city walls were expropriated, their owners compensated, and the structures demolished. By 1970 the Old City could once more be perceived as a distinct entity surrounded by landscape. Jaffa and Damascus gates, heretofore invisible from even a short distance, once again became dominant landmarks.

The story of the people of the city of Jerusalem through the millennia is a rich and varied one and is beyond the scope of this book. But as the students came to study and prepare plans for the Old City, it was essential for them to have a comprehensive understanding of the people who live there today. Through briefings they learned that by the turn of the sixteenth century the city was divided into four quarters — Muslim, Christian, Armenian, and Jewish. These were defined by the major markets that had been constructed over the foundations of the principal cross axis of the Roman city. Each quarter contained a homogeneous population. In 1896 the demographic breakdown of the city was 8,600 Muslims, 8,800 Christians, and 28,000 Jews. But in 1980 the students found a very different situation. The population within the city walls was only a small portion of the population of the metropolitan region. By 1980 the total population of Jerusalem was 440,000, which consisted of 316,000 Jews, 110,000 Muslims, and 14,000 Christians. The population of the Old City itself was 24,000.

The war of 1948 had had a considerable effect on the character of that population. The most profound change took place in the Jewish quarter. Until 1948 the majority of the Jewish population in the Old City consisted of poor and pious Jews clustered around yeshivas and synagogues. They constituted a very specific section of Jerusalem's overall Jewish population. After the surrender of the Jewish quarter to the Jordanians in 1948, the area remained in Jordanian control until 1967. Immediately after the unification of the city in 1967, the Corporation for the Reconstruction of the Jewish Quarter was established. This corporation was given substantial funds and authority to reconstruct and restore the Jewish quarter and to repopulate it. By 1980 partially destroyed buildings had all been restored and renovated and the areas of total destruction reconstructed. Initially the corporation had a policy aimed at assuring a mix of population in the quarter. Those who had lived there or whose families had lived there in the past were given priority, but apart from this special privilege, the corporation aspired to populate the quarter with a mix from Jerusalem's Jewish population,

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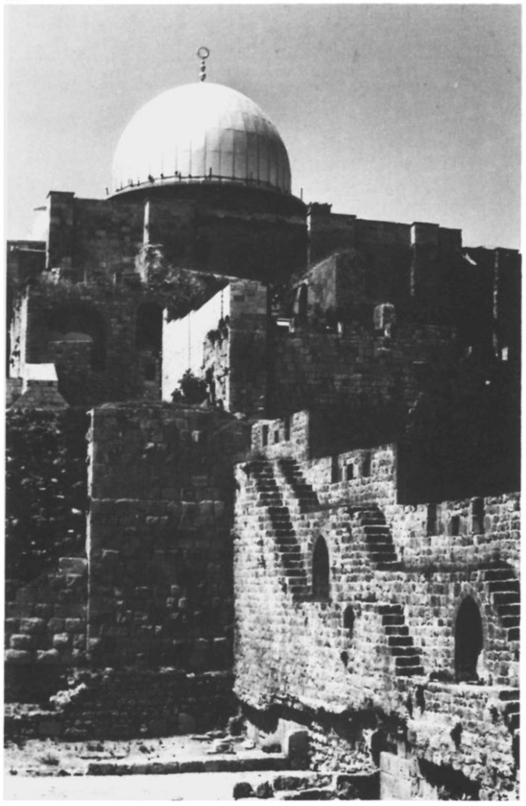

**2.2** *The present walls surrounding the Old City were built in the fifteenth century under the Turkish sultan Suleiman the Magnificent. Sections of the wall stand on the foundations of walls dating back to Solomon, Herod, and Hadrian. The photograph gives a view of the wall from inside the city, south of the Temple Mount. The stairs are provided to accommodate varying levels of topography.*

**2.3** *Four goats seek the wall's shelter.*

including the so-called secular and Orthodox Jews and people of limited as well as substantial means.

The Jewish quarter was reconstructed according to modern standards. Houses and apartments had all conveniences. The only departure from the normal Jerusalem neighborhood was that the houses were much more closely packed and one could not drive to one's front entrance. A network of alleys and walkways remained, and residents had to traverse a distance of sometimes three or four hundred meters to reach their dwelling. As reconstruction proceeded, the residents were promised that a garage would be built at the edge of the Jewish quarter to provide them with at least the convenience of parking.

The hopes of the corporation that the population would remain rather mixed did not come to fruition, and as a turnover in apartments took place, there was a tendency for the proportion of Orthodox Jews to increase and the secular ones to decrease. Nevertheless, it can be clearly stated that the reconstruction of the Jewish quarter brought about its gentrification. As compared with the population that inhabited the quarter in 1948, the present population is affluent and leads a life reasonably similar to that of any other Jewish neighborhood in Jerusalem.

During the period of division, a contrasting situation had been evolving in the Muslim quarter. Even during the Jordanian administration, the Muslim quarter had included a cross section of Jerusalem's Muslim population. Some of the old affluent families and community leaders lived in comfortable enclaves, such as the Nashashibis and the Nuisebas. In other sections of the quarter the poorer, less privileged people found accommodations. Around 1967, and at an accelerated rate thereafter, the affluent began fleeing the Old City. The wealthy families built themselves villas outside the city walls; some were located in the quarter of Sheikh Jarrah, others along Ramallah Road. In the Old City automobile access was difficult or impossible, parking at the periphery was inconvenient, and modern facilities such as water and sewer lines were inferior to those of areas outside the wall. Wealthy families could not resist what they perceived as the greater amenities outside the walls. By 1980 the students could see that the Muslim quarter had become a ghetto of the Muslim poor. Squatters crowded in dilapidated buildings, and old Mameluke *madrassas* (schools) had been converted into hovels. The buildings had deteriorated, maintenance was poor, and poverty appeared to be present everywhere.

2.3

Change could also be observed in the Christian and Armenian quarters. These had been inhabited through the last century primarily by individuals and families associated with the religious institutions that had been there for centuries. Although certain institutions as well as individuals serving within them had moved outside the city walls (for example, the American Colony missionary), the population nevertheless remained reasonably constant and comfortable and was supported by its institutions.

Mere statistics about demography and income groups obviously do not give the flavor of life in the walled city in Jerusalem. As the students traversed the alleys, walked through the markets, and conversed with residents and shopkeepers, the complexity and richness of this city within a city began to unfold. The markets themselves are in the best tradition of the Mediterranean *souks*. Partly built and roofed by Crusader vaults, they include every convenience — workshops, metalsmiths, butchers, vegetable stands, clothing stores, shops flooded with the aromas of spices, roasting coffee, broiling meats. Stores serving the populace are evenly mixed with other stores clearly serving the tourist: embroidered dresses, brasswork, and olive wood carved in images of the crucifixion, camel caravans, sacred monuments, and biblical scenes fill the racks of the shops.

It was at first somewhat difficult for the students to distinguish one group from the other, even though to the resident of Jerusalem it is obvious who is Jew or Arab, or for that matter, orthodox or secular. To the outsiders, they at first all seemed alike. But as they traversed the Old City, walked into residential areas, chatted with people, the students began to appreciate the complexity and diversity of the population. The recognized that each sector of the Old City is in itself homogeneous but saw that everybody intermingled in the markets: tourists, Arabs, Israelis, Muslims, Christians, and Jews of every persuasion were out there shopping, talking, and eating.

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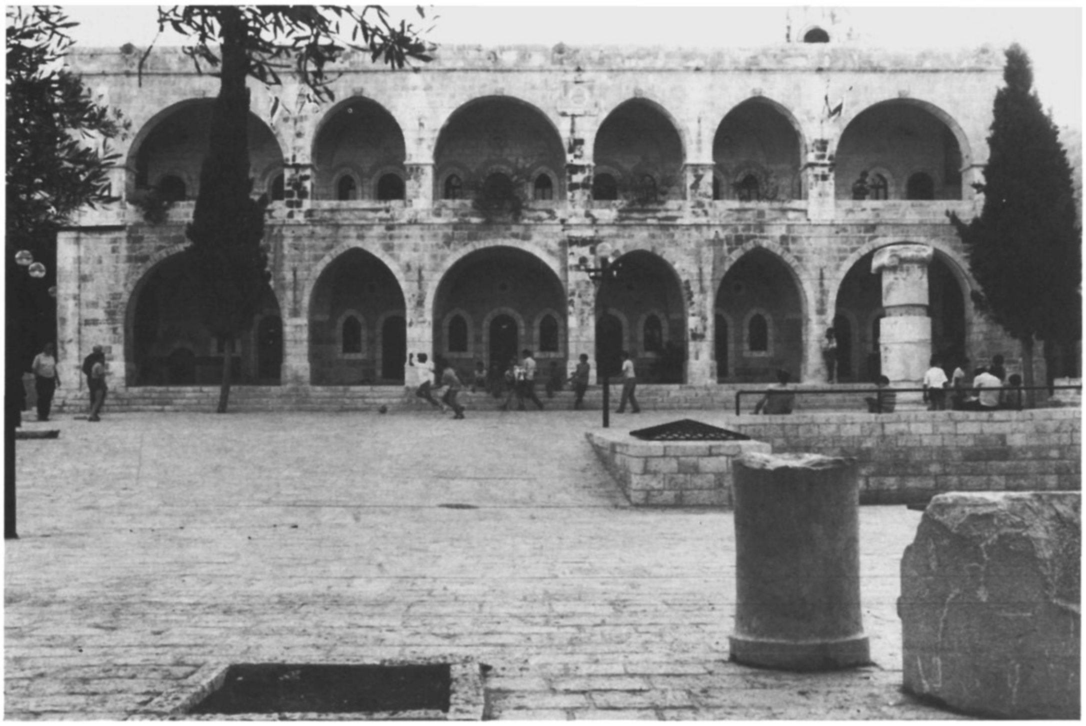

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**2.4** *Batey Mahasseh Square in the Jewish quarter.*

**2.5** *Constant reminders of political tension, Israeli soldiers patrol in the markets.*

**2.6** *Two Yeshiva students make their way to prayers at the Wailing Wall.*

**2.7** *Greek Orthodox priests pause for a photograph.*

**2.8** *An Armenian Orthodox monk in full traditional costume.*

**2.9** *The central courtyard in the Armenian compound.*

**2.10** *A spiral stair off the central courtyard in the Armenian quarter.*

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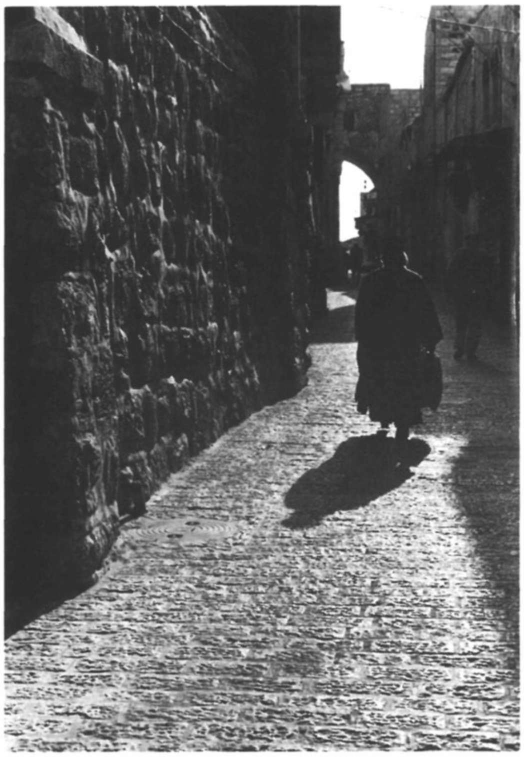

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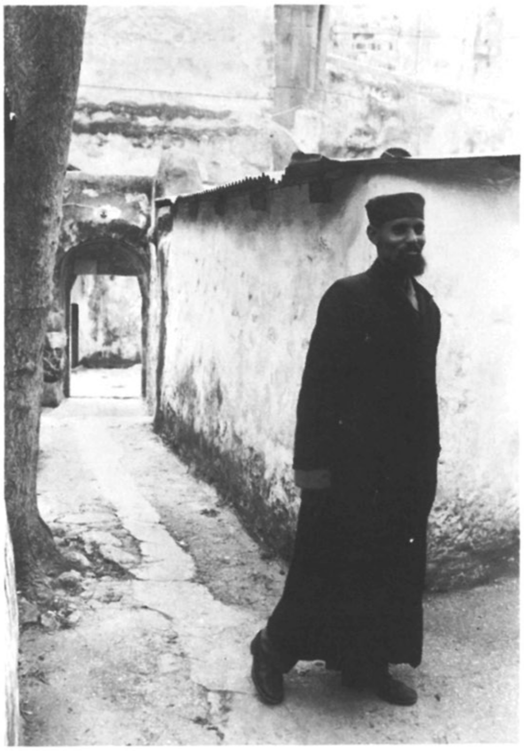


**2.11** *A Greek Orthodox priest walks along Via Dolorosa (Way of the Cross), the same path Jesus walked to the place of Golgatha, the site of the crucifixion.*

**2.12** *A small child stands in the Street of Christians on original stone pavers dating from Pontius Pilate's time.*

**2.13** *A cool and serene court in the Christian quarter.*

**2.14** *A Coptic priest at the Coptic colony on top of the Holy Sepulchre.*

**2.15** *Children in front of their modest abode.*

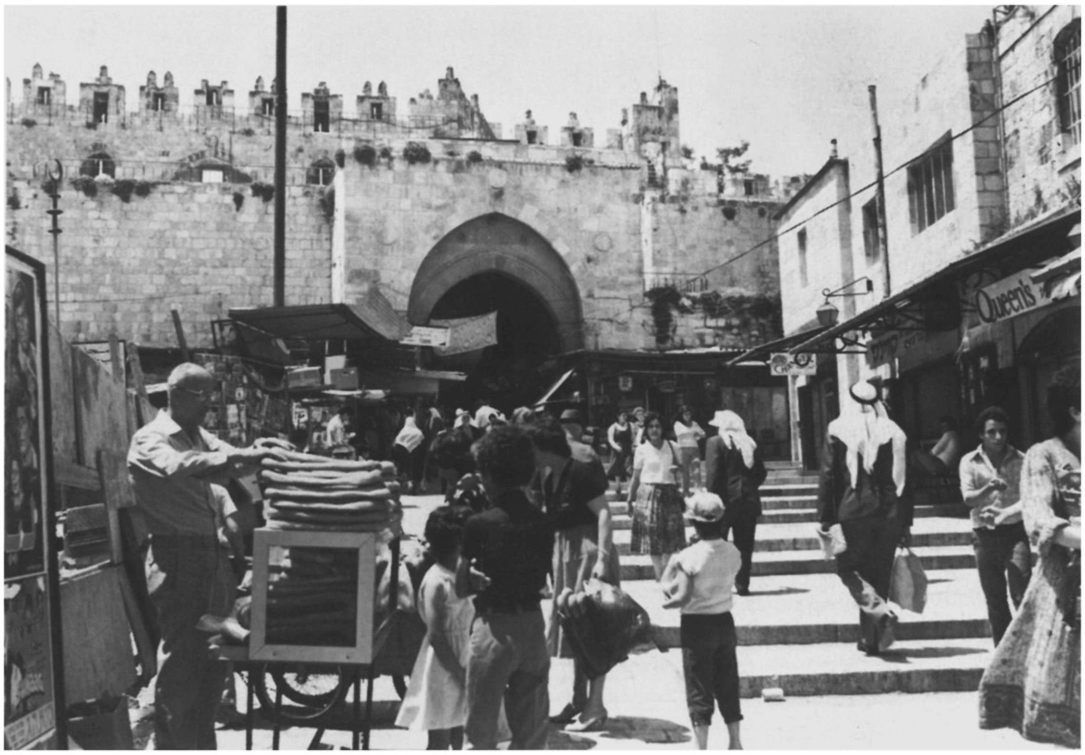
**2.16** *Bedouin woman with fresh vegetables and fruits for sale.*

**2.17** *Vendors along the stairs descending from Damascus Gate to the bazaars of the Old City.*

**2.18** *Muslim women on the way to prayer on the Haram es Sharif.*

**2.19** *A Mameluke archway that has known better times.*

**2.17**



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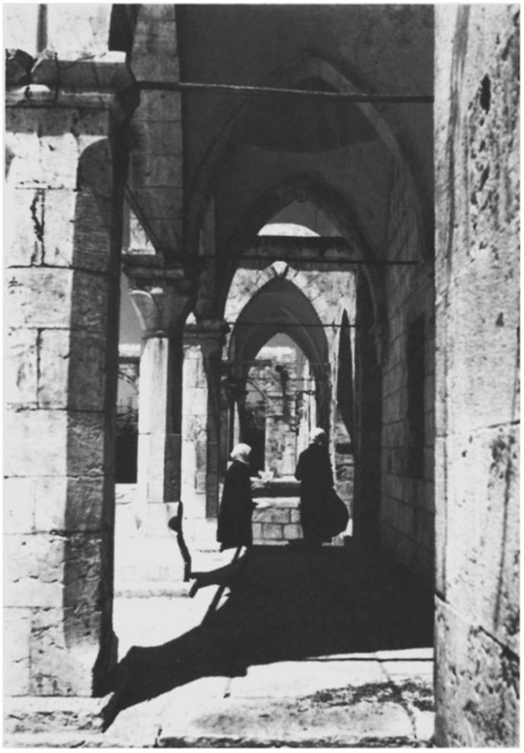

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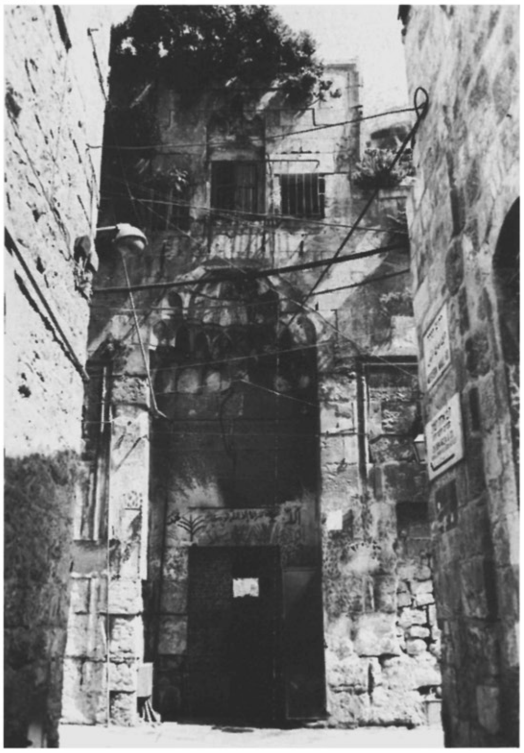

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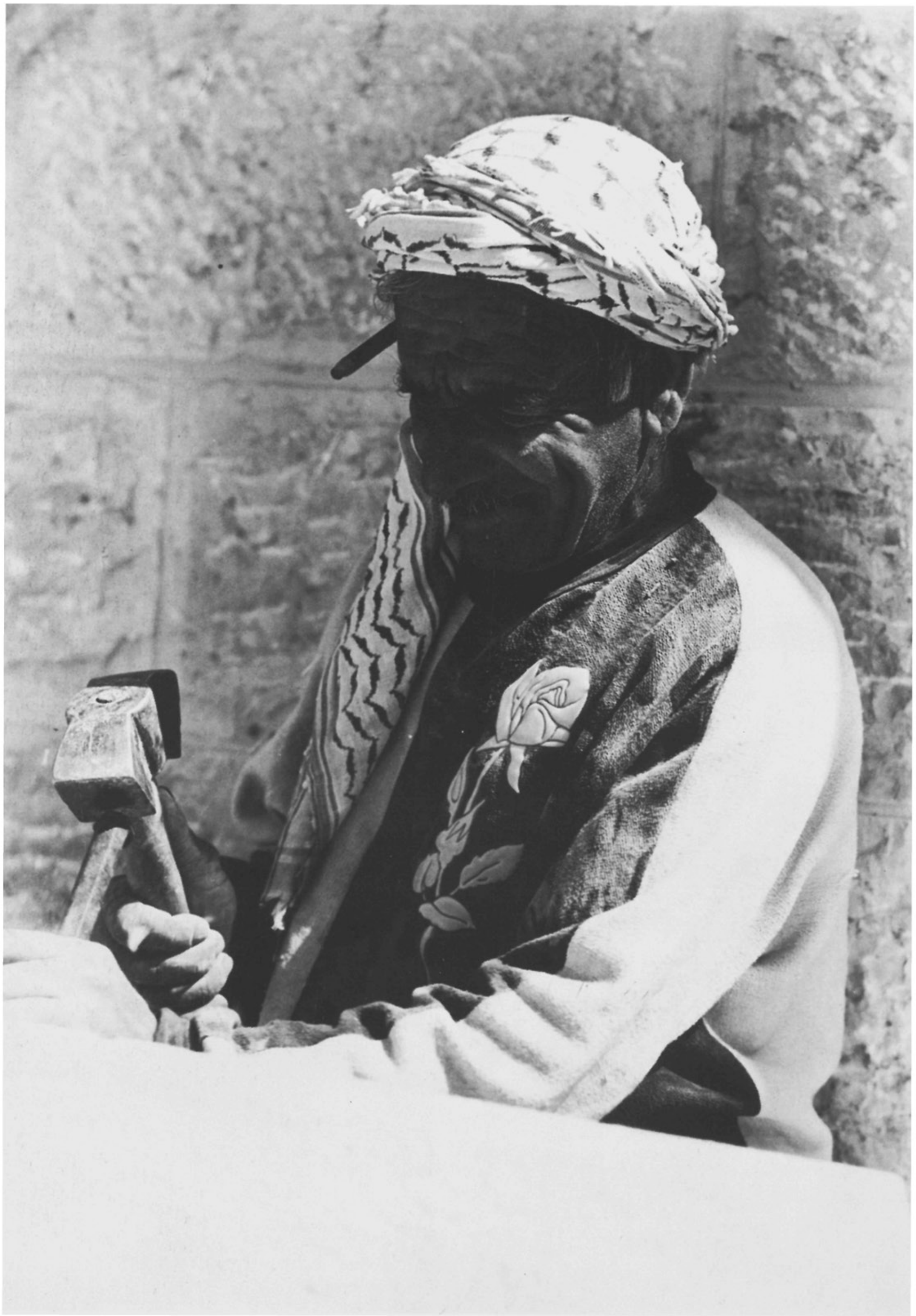

**2.20** *A mason at work.*

**2.21** *Three Arabs discuss sales at the street market, which occurs every Friday morning outside the northeast corner of the walls.*

**2.22** *An Orthodox Jew finds a quiet place in the market to read a daily newspaper.*

**2.23** *Most of the markets have developed along the historic routes within the walls (the cardo and decumanus). The Bazaars are constructed in the form of enclosed arcades with light and air filtering through skylights and lateral air vents. They are therefore cool and shady in summer and sheltered from winter wind and rain.*

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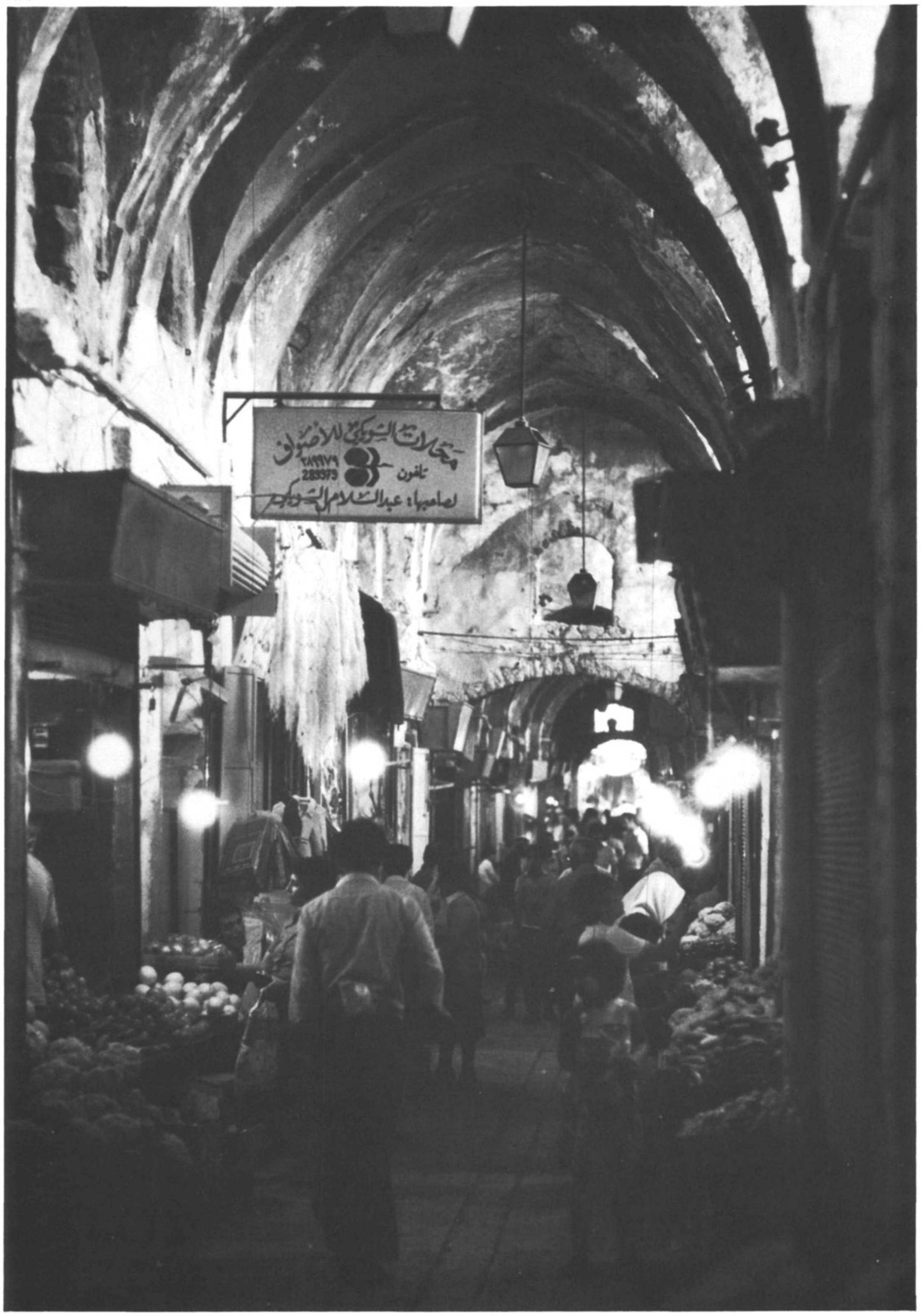
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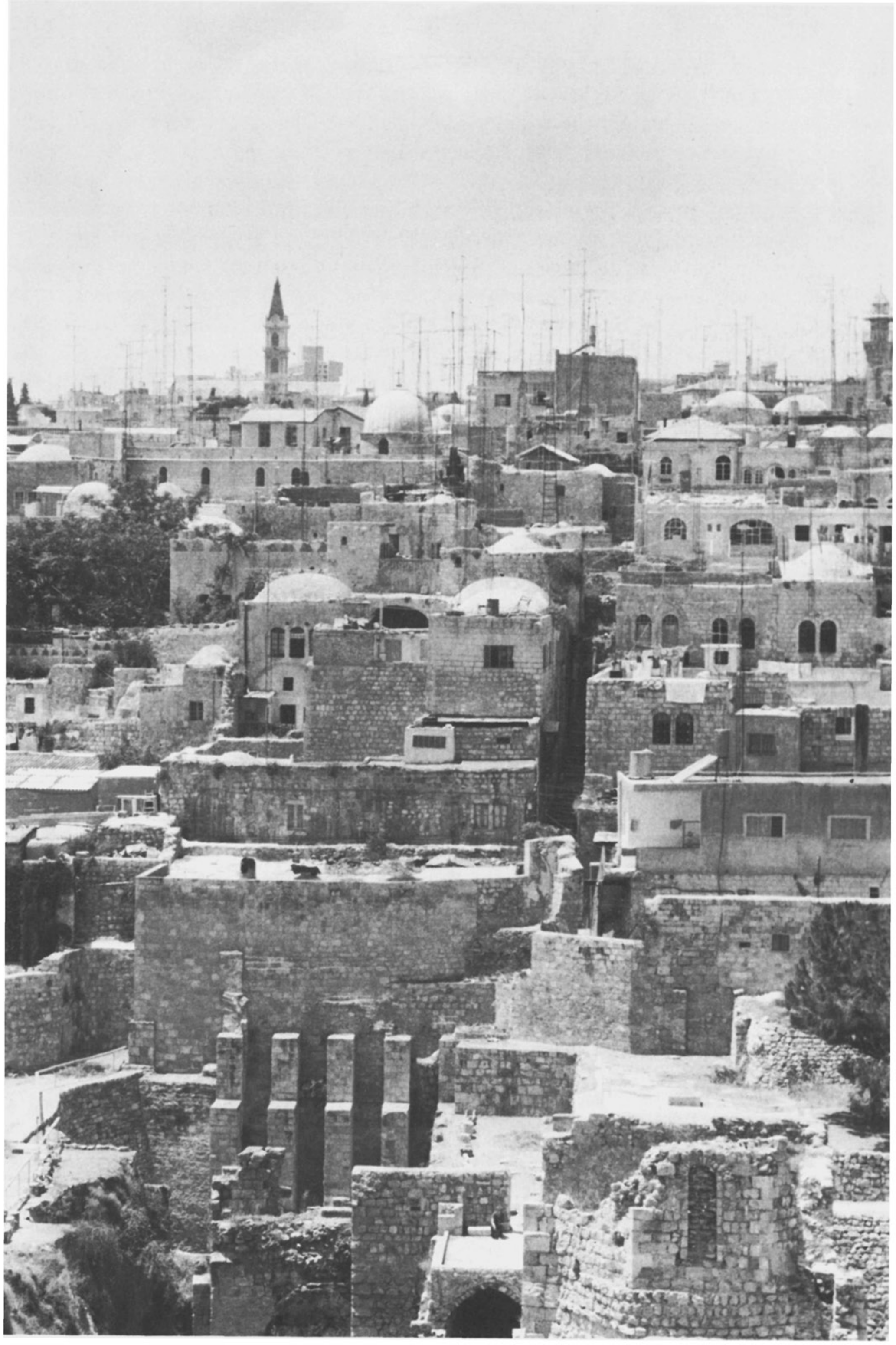
**2.24** *Armenian Christians in procession to the Cathedral of St. James. Armenians have resided in the city since the fourth century A.D. They consider Jerusalem a spiritual capital for a stateless people.*

**2.25** *Nuns walk up Via Dolorosa.*

**2.26** *Jewish kids preparing for their Bar Mitzva ceremony.*

**2.27** *Jerusalem's four thousand years of continuous settlement are often revealed in unexpected cross sections like this view from the wall across the Pool of Bethesda. Piled atop one another are the pool, which dates from the time of Herod; the remains of Byzantine and Crusader churches; domed Ottoman houses; and contemporary television antennas.*

**2.27**



## PRESSURES ON THE OLD CITY: KEY ISSUES

The richness and diversity of life in the Old City cannot conceal the great pressures bringing about change. For the students arriving from Cambridge, Massachusetts, it was an impressive if somewhat unbelievable sight to witness goods and merchandise being unloaded into little carts pulled by men or donkeys down the stepped alleys of the market. Trucks parked by the gates were filled with goods waiting for transfer to the shops — a somewhat incongruous image at what constituted the sacred routes to the holy places. Our initial statement that the Old City is a pedestrian zone and that vehicular access does not extend beyond the gates proved to be an oversimplification. One drivable road extends from Jaffa Gate through the Armenian and Jewish quarters to Dung Gate and carries heavy traffic. Similar intrusion penetrates through Lion's Gate, where the road forming the first section of the Via Dolorosa is free of steps and wide enough for vehicles. As a result, vehicles penetrate and park in many unlikely corners up to the Cotton Market and the Western Wall. While this penetration of vehicles shows the fragility of the Old City and the great pressure on those seeking to simplify deliveries and servicing of the shops and residences, the situation at the gates is even more appalling. In addition to the unloading trucks and buses, mostly concentrated at Damascus and Jaffa gates, hundreds of vehicles park by the gates; some belong to residents but most to tourists and pilgrims. The number of cars is greater on the Sabbath, a recreational day for large numbers of Jews, when people from all over Israel come to browse in the Old City markets. The mixture of unpaved parking lots and delivery trucks presents a most unflattering view of a holy city.

The students were not reassured on examining the interior of the Old City. Signs of deterioration were present in many parts, particularly in the Muslim quarter. Most apparent was the deterioration of buildings. Residences were in disrepair; walls were cracking; buildings were covered with additions built of concrete block and tin. Most appalling was the condition of some of the historic buildings. The Mameluke *madrassas*, water fountains, and other great institutions built in the thirteenth century were in disrepair. Residents within them had divided the great spaces, using any means available to them.

In many parts of the Old City, the students observed that the paving of the alleys had been removed and excavations were taking place for the laying of sewer and water pipes. At meetings with city officials, they learned about the urgent need for action. Before 1967 many of the residents obtained water from cisterns. Running water from taps was sparsely available, with one tap serving several families. When the city was united, a major effort was made to equalize the level of services in all parts of the city. One of the first actions was to bring piped water to every residence in the Old City. But the piped water meant that the consumption of water increased, overloading the Old City's sewer system, which had been built five hundred years earlier by the Ottomans. It had not been altered or maintained since then. Whole sections had collapsed, while other parts seemed, miraculously, to be still operating. But in 1972 the sewers gave way. A flood of smelly black fluid burst out, threatening to inundate the plaza in front of the Western Wall. Excavating the alleys in order to install the sewer system created another set of problems. As rain penetrated under the building foundations, settlement took place and many buildings cracked open. Therefore, construction of the sewer had to be combined with underpinnings and structural repairs.

While the installation of sewer, water, and electricity lines had to be left to the initiative of the public sector, the private sector took care of television. As the students walked the alleys of the Old City, they observed that almost every residence appeared to have a massive television antenna.

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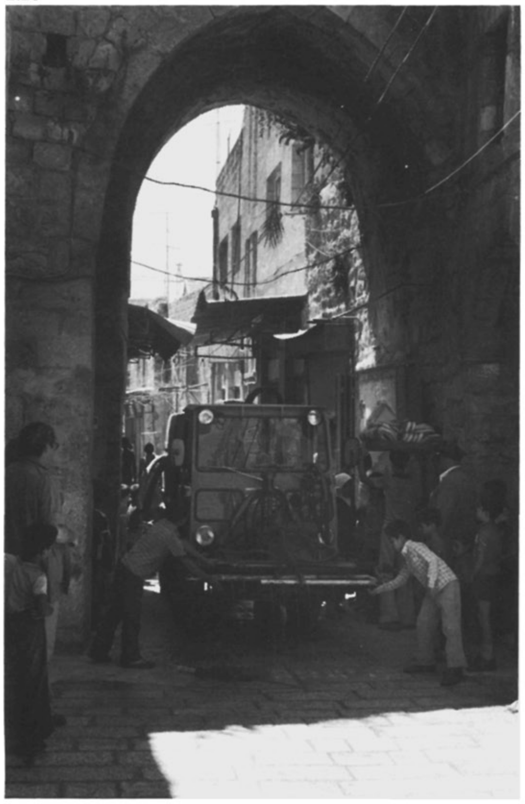

**2.28** *Once adequate for donkeys and camels, streets and paths in the Old City can barely accommodate contemporary service and emergency vehicles.*

**2.29** *Congestion outside Jaffa Gate. Less than one in twenty-five residents in the Old City owns a private vehicle, but as car ownership and tourism increase, congestion and environmental pollution degrade the qualities of the Old City.*

**2.30** *Servicing the Old City is a rather difficult task. Few vehicles are able to penetrate the city gates and its narrow alleys.*

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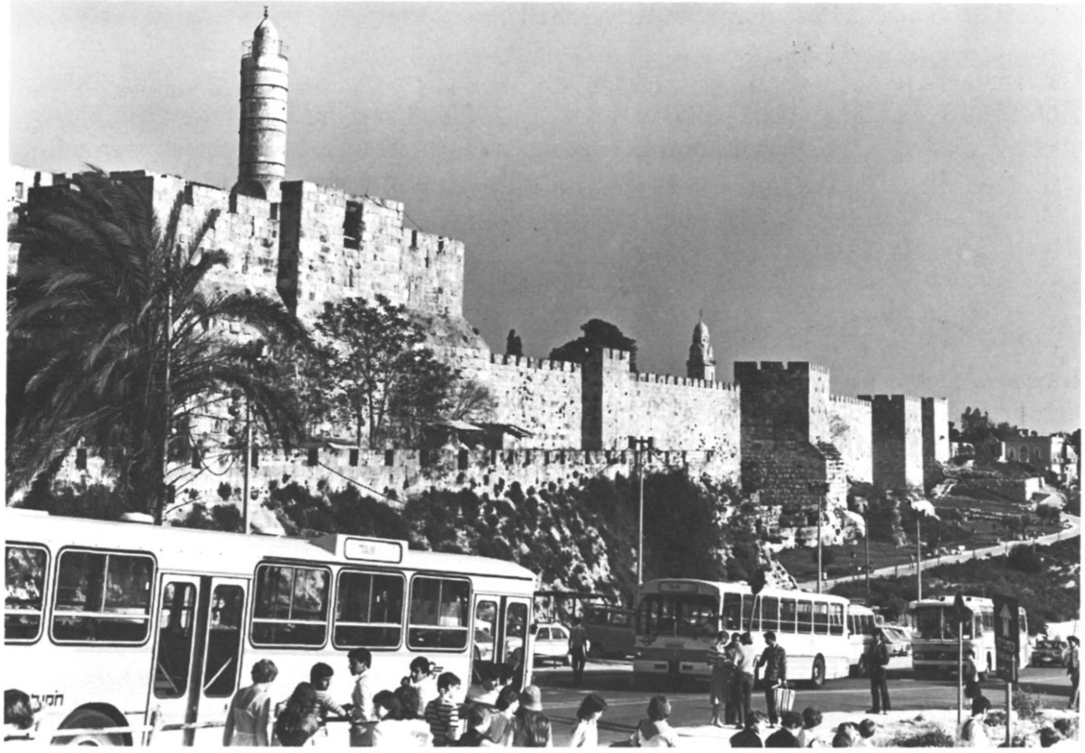

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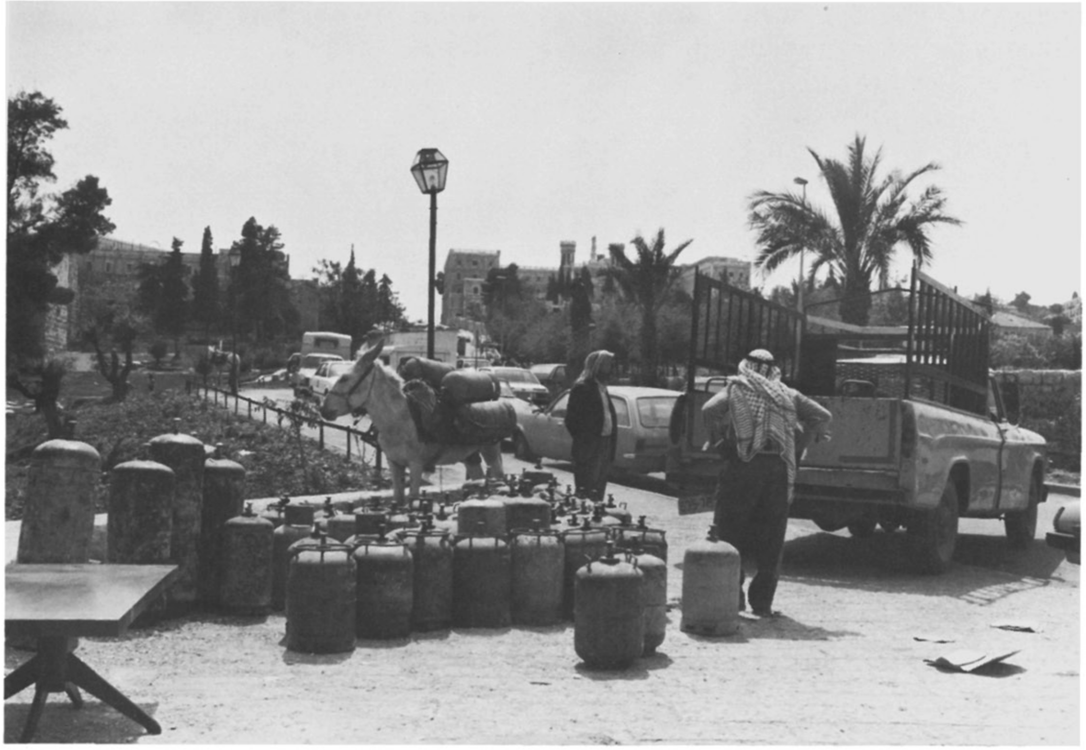

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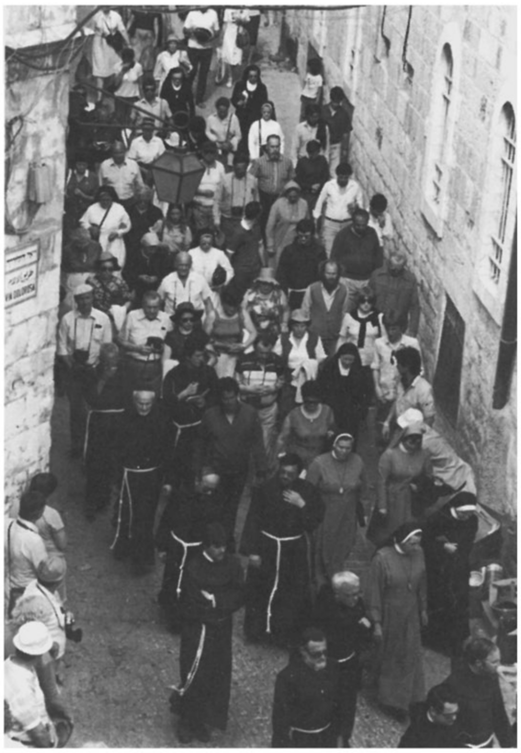

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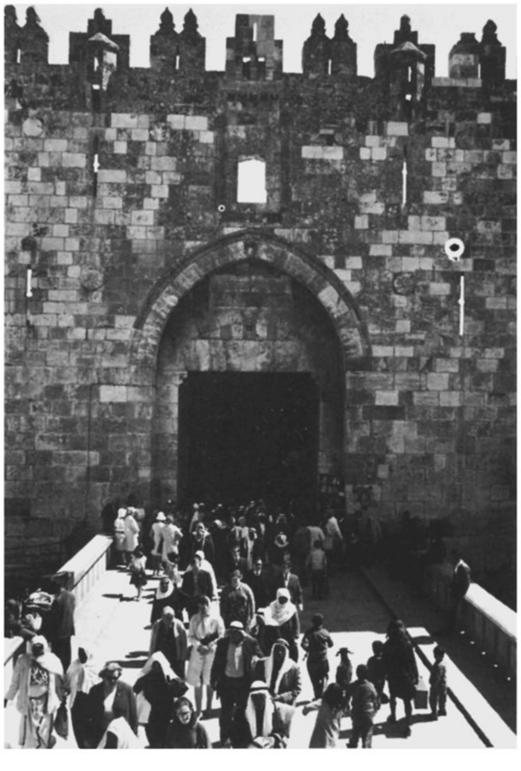


Thousands of antennas crowned the silhouette of the entire city, except in the Jewish quarter, where a master antenna had been installed and cable connections made to individual homes. A similar system was being implemented in the other quarters.

After their exhausting walks, the students and the faculty met in the evenings to discuss their findings and identify the issues. Some issues were obvious, others more subtle. In the first category was the question of servicing the Old City. Should cars be allowed? Consensus appeared to be against it. In that case, what must be provided in the area of the city gates to service the population and the businesses? Was the present system of carts adequate? Should a more contemporary system be installed? How much parking should be provided at the city gates? Should there be parking for residents, for pilgrims and tourists? Should it be on the surface or underground? Who would pay for it? What improvements could be made for trucking and deliveries to the Old City? What about certain modern conveniences — for example, firefighting or emergency ambulance service? It was agreed that programs should be initiated to bring about the improvement of living conditions in the Muslim quarter; but what procedures and funding could effectively cope with what seemed like ongoing deterioration?

The more subtle list of issues related to the holy places and the ritual routes leading to them. Is there a conflict between tourism and the sacred character of Jerusalem? How should one deal with the routes that the pilgrims traverse to the Holy Sepulchre from Bethlehem on Christmas and Easter and from the Mount of Olives to the Via Dolorosa? Or the Muslim pilgrims coming on Fridays and Muslim high holidays to the Harem el Sharif from the villages, entering from Dung, St. Stephen's, and Damascus gates? Or the Orthodox Jews coming from Mea Shearim toward the Western Wall?

Of even greater complexity was the impact of all these actions on the present population of the Old City. The question of gentrification pervaded the discussions. Those familiar with European historic cities testified that renovation, restoration, and improved services invariably brought about gentrification of the old sectors. Thus the old city of Cordoba and sectors of Rome and Florence changed dramatically as public and private improvement programs were initiated. Since the renovated buildings were desirable, the wealthy slowly displaced the poor. This problem had a precedent in Jerusalem. The neighborhood of Yemin Moshe immediately outside Jaffa Gate was built at the turn of the century. In 1948 the neighborhood became a border area. Dangerous to live in, it rapidly deteriorated, and poor families, mostly recent immigrants, moved in. Conditions in the neighborhood were not dissimilar from those in some parts of the Old City. In 1967 when the city was united, Yemin Moshe was suddenly in the heart of the city, with the danger removed. A development corporation was established to bring about its renovation. Slowly the corporation bought out the existing residents, who resettled elsewhere. A new population of rich families leased the dilapidated buildings and renovated them in lavish style.

The dilemma seemed particularly difficult in the Christian and Muslim quarters. (In the Jewish quarter gentrification seemed a fait accompli.) If services were not to be provided to these quarters, if parking continued to be difficult, ownership of a car impossible, access cumbersome, and the condition of buildings poor, then the Muslim quarter would continue to have a concentration of Jerusalem's Arab poor. But if services were to be provided and public or private funds made available for restoration, would not the poor be displaced? Where would they go? The answer was not clear-cut and was to be the subject of intensive discussions and alternative proposals, as will be seen later. Nor was there a conclusive decision as to whether gentrification was good or bad. In a meeting with the mayor, students expressed concern over gentrification, only to be surprised by his response. He could think of nothing

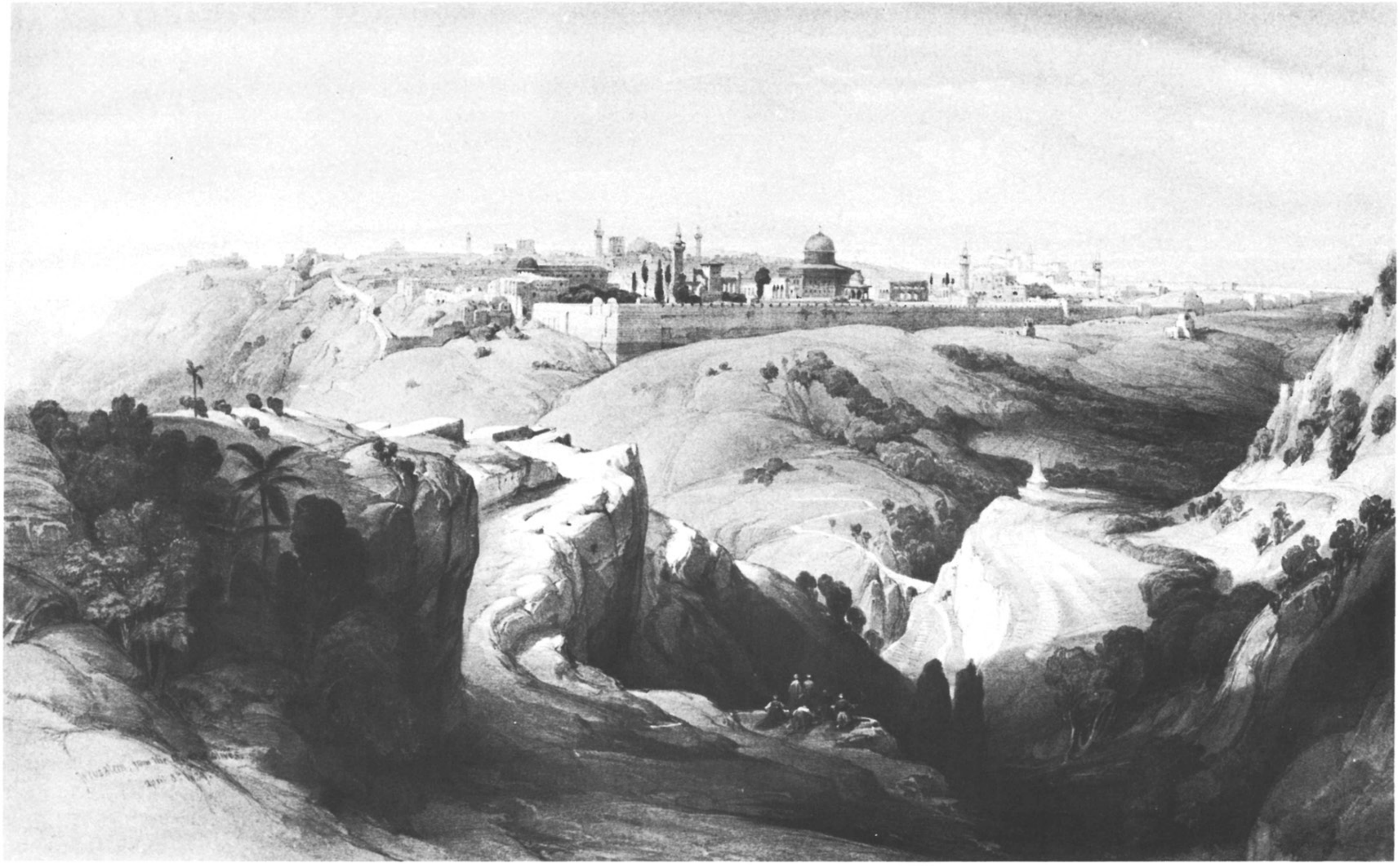
**2.31–34** *Several of the many attractions in the Old City: Al Aqsa Mosque (2.31), Via Dolorosa (2.32), the markets (2.33), and Damascus Gate (2.34). Approximately 1.2 million tourists visited Jerusalem in 1983. While this results in economic benefits, the negative impact of commercialism and simple wear and tear on historic areas cannot be discounted.*

better for the Muslim quarter. Attracting the wealthier Muslim families back to the Old City would be the best way to bring about an improvement in the environment, the condition of buildings, and the preservation of the city. Gentrification, the mayor said, was an effective way to protect Jerusalem's heritage, including its Muslim heritage.

The students were grouped into teams and assigned to specific areas of the Old City and its gates. As they began their study, the teams realized that the Old City could not be isolated from its visual basin. The gates had to be studied in conjunction with the land surrounding them, and the main routes within the Old City in conjunction with the routes that led to them outside the gates. Every action within the Old City seemed to have impact on what was immediately outside it, and vice versa. Thus the study was expanded to include both the Old City and its visual basin. Before embarking on the development of specific designs, the teams mapped relevant information such as city walls; landmarks consisting of spires, minarets, churches, and domes; cemeteries; open space; major institutions; and the numbers of vehicles, goods, and pedestrian flows that had been surveyed by the municipality.

**2.35** *The romantic vision of Jerusalem is usually that depicted by nineteenth-century British artists — a city set in a rugged landscape, contained by valleys, and clearly defined from pastoral surroundings. A view from the Mount of Olives by David Roberts, April 1829.*

**2.35**



## PLANS FOR THE VISUAL BASIN

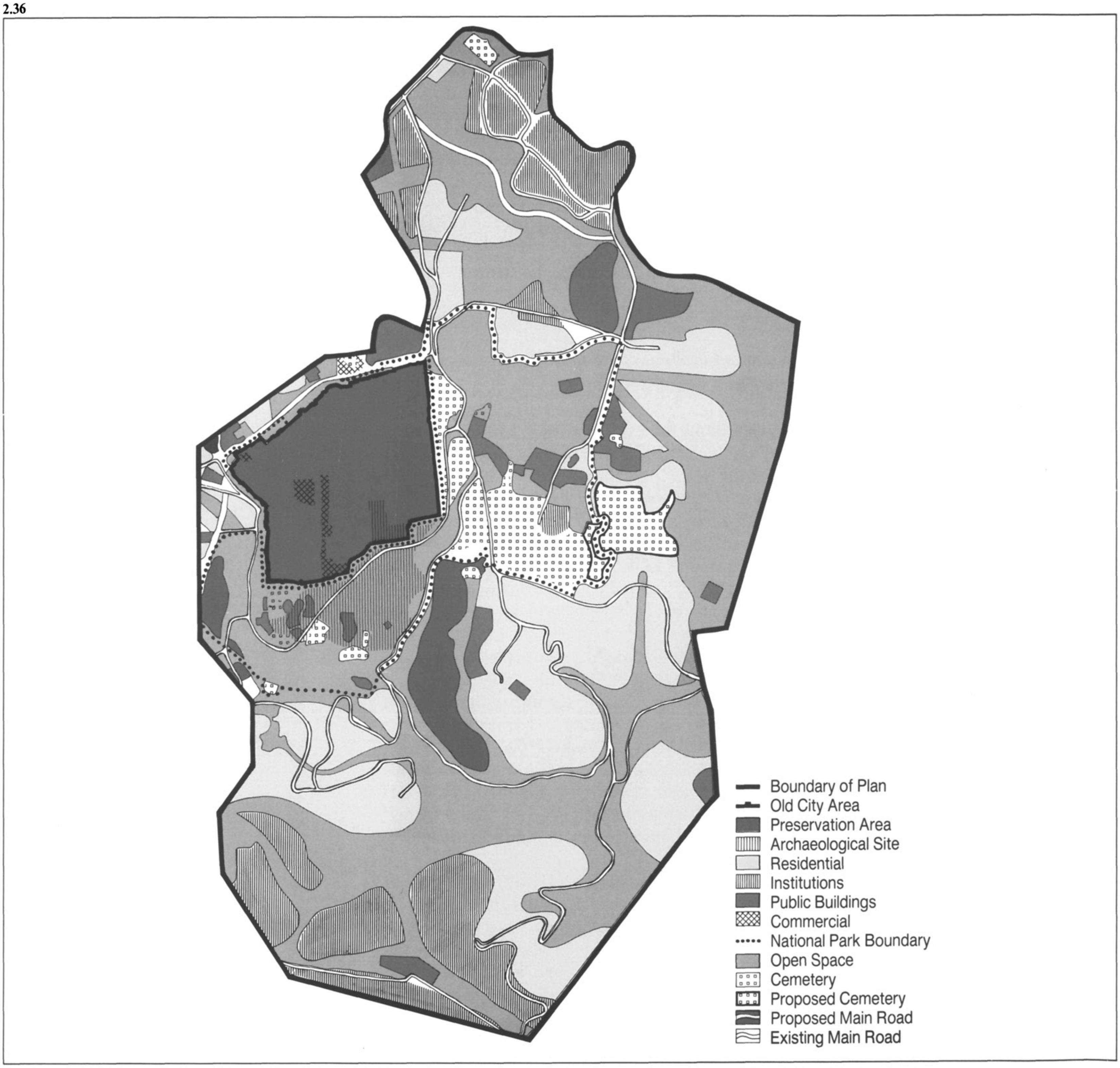
In addition to setting the context, the students were required to familiarize themselves with existing official plans. Although there seemed to be no up-to-date master plan for the entire city, there was a recent plan for the Old City and its visual basin developed and prepared by Arieh Sharon and David Brutzkus, which was officially adopted by the district planning committee in 1970 (see Sharon and Brutzkus, *Planning Jerusalem*, 1973). The plan, known as IM9, proposed

1. a national park around the Old City with extensive boundaries to the south;
2. setting a population ceiling of 85,000 within the zone, up from a 1967 population of 50,000;
3. subdividing the area into twenty units for independent planning, with top priority given to areas near the Damascus and Jaffa gates;
4. architectural controls to promote "openness" — lower buildings facing the valley with higher buildings climbing the slopes;
5. reserving the northern slope of the Hill of Evil Counsel for hotels;
6. reserving the area southeast of Silwan for a special housing area;
7. a parking terminal for Mamilla; and
8. a detailed plan for the Old City including limits for residential and commercial zones, commercial streets, and sites for public buildings; a landscape buffer surrounding the Old City — fifty meters on the outside and ten meters on the inside; guidelines to keep buildings in scale with their surroundings; and the mandatory use of stone as a building material.

It seemed appropriate that the studios should begin with the Old City and its environs. Somehow dealing with the heart — with the sacred places — would give an understanding that would later help in dealing with the whole. Several studios were organized, focusing on specific and general parts of the Old City. One studio was led by Richard Krauss, Jonathan Lane, and Moshe Safdie. Students from the Urban Design, Landscape Architecture, and Architecture departments were divided into several teams. Two teams studied the entire Old City: the role the gates should play and the paths, services, and policies that might enhance the conservation and preservation of the Old City. Three other teams dealt with St. Stephen's Gate, which is clearly one of the ritual entrances to the Old City. It serves Muslims coming to the Haram el Sharif and is a principal access route to the Via Dolorosa, the connector between the sacred places on the Mount of Olives and the route Jesus walked before he was crucified. Furthermore, at the time of the study it was one of the gates in the worst physical condition (St. Stephen's Gate was modified in the 1930s by the British to enable vehicular traffic to enter). Roads stretching into the Old City from the gate were now littered with cars on every vacant corner. A larger group of student teams tackled Damascus Gate and the surrounding areas, a subject to which we shall return in chapter 3.

A studio directed by Nadar Ardalan had a different emphasis: the Old City as a sacred place, including the holy places and the ritual paths leading to them. Several teams focused on different subjects. One studied the Mount of Olives and the Chapel of the Ascension. Others studied housing in places such as Bab Hutta, a dilapidated area in the Muslim quarter, and Mamilla, west of Jaffa Gate. Another team studied the renovation and conversion of old buildings next to Suq al Qattanin, the Cotton Market, near the Temple Mount. A team of four took an overview of the Old City and its environs. This team was particularly concerned with the external pressures on the Old City, their impact on the visual basin, and the interventions and designs that might reverse some of the emerging negative trends.

2.36


Boundary of Plan
Old City Area
Preservation Area
Archaeological Site
Residential
Institutions
Public Buildings
Commercial
National Park Boundary
Open Space
Cemetery
Proposed Cemetery
Proposed Main Road
Existing Main Road

**2.36** *The official plan for the environs of the Old City (IM9) by Sharon and Brutzkus was adopted in 1970. It proposed a national park around the Old City with extensive boundaries to the south; a population ceiling of 85,000 within the zone, up from a 1967 population of 50,000; subdividing the area into twenty units for independent planning, with top priority given to areas near the Damascus and Jaffa gates; architectural controls to promote "openess" — lower buildings facing the valleys with higher buildings climbing the slopes; reserving the northern slope of the Hill of Evil Counsel for hotels; reserving the area southeast of Silwan for a special housing area; a parking terminal for Mamilla. Its detailed plan for the Old City included limits for residential and commercial zones, commercial streets, and sites for public buildings; a landscape buffer around the Old City — fifty meters on the outside and ten meters on the inside; guidelines to keep buildings in scale with their surroundings, and the mandatory use of stone as a building material.*

The team consisting of Melissa Ix, Mark Johnson, Todd Johnson, and Simon Smithson began by documenting the forces acting on the Old City, such as tourism and the resulting buses, traffic, and parking. They also studied physical conditions in the Old City, in particular the pressures created by growing affluence and demands for services, and conducted a visual analysis of how the Old City is perceived from different sections of the city. The point was that views of the Old City had intrinsic value; the clear identity of the Old City in the landscape could be preserved only if certain areas were kept as open spaces. Through their analysis, which included drawing views of the Old City from every direction, the students identified the areas that might be the most sensitive. Their recommendations were similar to those of the official plan IM9 in calling for the preservation of the park system surrounding the Old City. This, however, was where the similarity ended. The team proposed radical departures from IM9 in the handling of vehicular traffic, parking, and services.

The authors of IM9, Sharon and Brutzkus, recognized the tremendous pressure put on the city gates by the population of the Old City and its servicing needs, as well as by the pilgrims and tourists. Therefore, they recommended major parking facilities directly outside the city at Jaffa and Damascus gates and an additional parking structure within the walls at the Jewish quarter. The reasoning was obvious: since the Old City was substantially pedestrian and since it had been recommended that it be made exclusively a pedestrian area, residents and tourists would have to traverse considerable distances by foot within the Old City. The farthest distance from any of the gates to the center of the Old City was approximately a half mile, a walk that would take about seven minutes. The distance and time of walking were perhaps the least problematic issues, however. More serious were the questions of deliveries, carrying parcels home, emergency requirements such as ambulances and fire trucks, and other needs of daily life. To minimize the inconvenience, IM9 proposed setting the terminals directly at the gates.

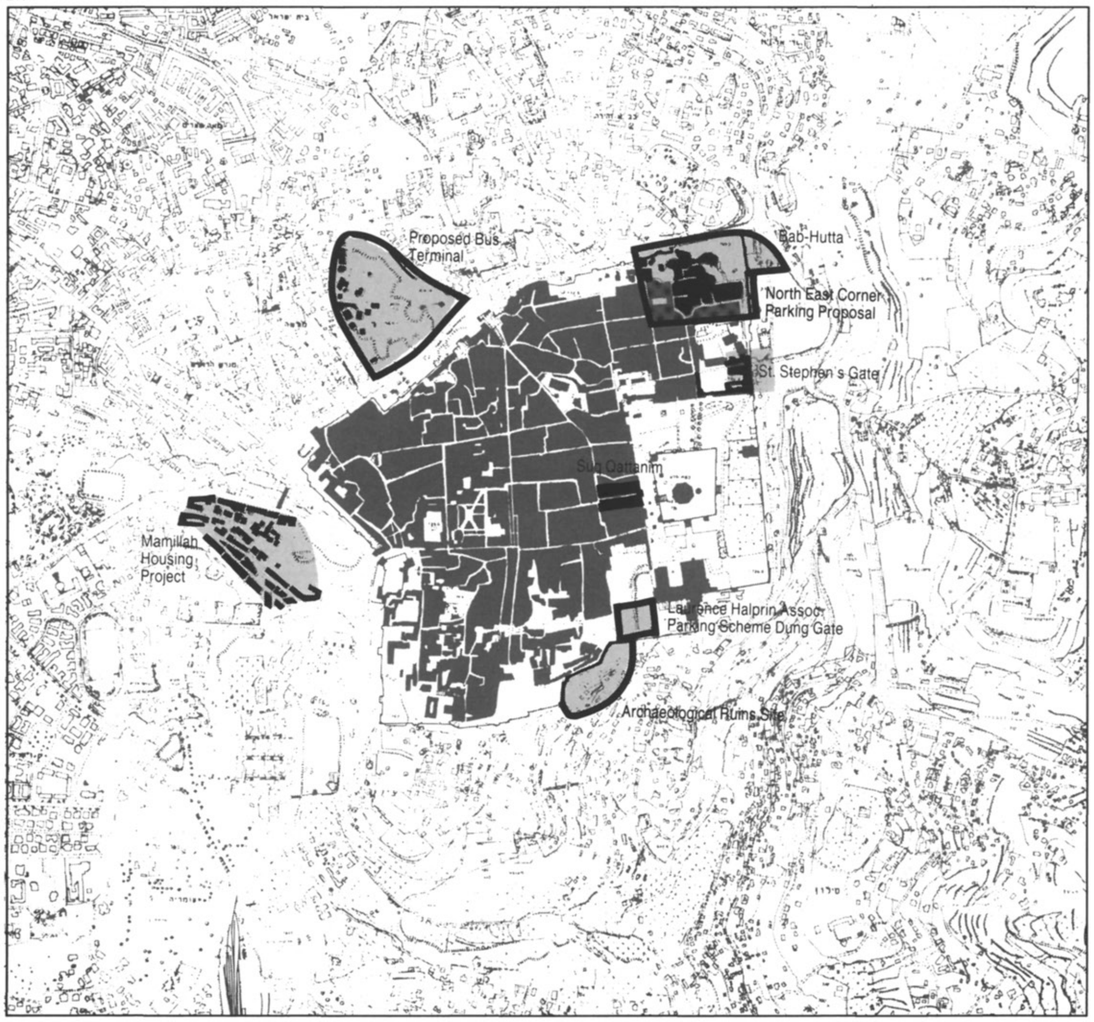
Our team took issue with these conclusions. They observed that the provision of these facilities by the gates might have a long-term destructive effect. Furthermore, the ring roads that surround the Old City walls — from Damascus Gate to Jaffa Gate, crossing over Mount Zion to Dung Gate, circumventing the Old City to Lion's Gate, and hooking around back to Herod's Gate and Damascus Gate — carry an increasing load of traffic. The terminals would only add to this flow of traffic. It was argued that this heavy traffic passing adjacent to the walls and the parks next to them would pollute and drastically change the sacred character of the Old City. To counteract this, the team proposed that the transition from the bustling modern city into the Old City proper should be gradual. An intermediate zone stretching north from the city walls, a distance of approximately 1,300 feet, with severe limits on development should be established — an outer layer of controlled development resonating the character of what lies behind the walls.

To achieve this, a number of interventions were proposed. An outer ring road traversing a distance of approximately one mile would be constructed, surrounding the northern segment of the Old City at a distance of four hundred meters from the existing ring road. The proposal was similar to ring roads around large metropolitan areas designed to bypass the downtown without entering the area of severe congestion, as can be seen in such cities as Paris, Boston, and Baltimore, except that in this case it would be on a much smaller scale. In conjunction with this ring road would be a number of parking and commercial facilities located at a distance from the gates. The area stretching between these developments and the walls and gates would be subject to minimal development and would include new open spaces. Specific proposals were also made for development in the Arab central business district along Salah el Din Road and across from Damascus Gate.

The proposal was controversial. Some faculty felt that the controls were appropriate; only extreme action would prevent the deterioration of the Old City and the irreversible impact on its sacred qualities. While recognizing that the restrictions on development surrounding the walls and the stretching out of services away from the gates would cause some inconvenience, they asserted that living in or visiting the Old City was a privilege; those desiring to do so would simply have to put up with these inconveniences. They pointed out that certain other historic cities have created similar controls under the pressure of tourism. In Venice, for example, everybody accepts the inconvenience of having to transfer to water transportation.

Other faculty members expressed doubt about the feasibility, practicality, or desirability of the proposal. They argued that the ring road would be prohibitively expensive. In order for it to act as a complete network, it would need to pass adjacent to the Russian compound and the area of King David Street, an area that is presently heavily urbanized. This would require costly and difficult expropriation, relocation, and demolition of buildings. They noted that Jerusalem had not been very successful in the past in constructing new roads in urbanized areas. Nor were the consequences of such demolition necessarily acceptable. It was also

**2.37**


Proposed Bus Terminal
Bab-Hutta
North East Corner Parking Proposal
St. Stephen's Gate
Suq Qattanim
Mamillah Housing Project
Lawrence Halprin Assoc. Parking Scheme Dung Gate
Archaeological Ruins Site

**2.37** *Location of projects in the environs of the Old City.*

pointed out that the team had not demonstrated that the convenience of providing services by the gates could not be achieved in a manner that was visually and environmentally acceptable.

Obviously, no conclusion or consensus was reached on the pros and cons of this proposal, but it served to provoke fundamental questions about the nature and character of the connection between the old and the new cities. In rejecting what was taken for granted by most of the faculty and students, that is, accommodating the demand for conveniences by both residents and visitors, the team of four opened up a range of new possibilities and policies aimed at protecting the heritage of the city.

In their quest for understanding the ritual paths, the students expanded their area of study to consider the landmarks that formed the sequence of pilgrimage. One student, Joseph DePace, focused on the Chapel of the Ascension located on the top of Mount Scopus. The chapel was cut off from its surroundings by the Intercontinental Hotel to the south of it and by a heavily trafficked road separating it from the Kidron Valley and the Old City beyond. Thus this significant landmark was deprived of an appropriate setting and a connection to the route down the slopes of the Mount of Olives toward St. Stephen's Gate and the Via Dolorosa. DePace proposed a new garden, a place of meditation across the street overlooking the Old City, which would connect to the Chapel of the Ascension and form a sequence that would lead the pilgrims from the chapel to the garden and then down the Mount of Olives toward the onion-domed Russian Orthodox St. Mary Magdalene church and the Tomb of the Virgin.

His objective was "to organize conflicting movement systems; to create a place of rest, tranquillity, and contemplation appropriate to the historic and holy nature of the site; and to heighten the value of the site as a pivotal gateway to the visual basin of the Old City." The design resolution worked with the existing sloping terrain by creating a scale that extended the space before the chapel while developing a courtyard of shadows and water. DePace incorporated and designated around the progression of light a positive spatial system of connection, transition, and culmination. This was realized in the contemporary idiom of a concrete structure sheathed in Jerusalem limestone and infilled with wooden panels.

In contrast to these proposals, Guy Hagstette and Hamdan Shamsuri tackled the parking problem of St. Stephen's Gate. The two set out to demonstrate that the chaotic parking along the street immediately adjacent to and inside the gate could be relocated outside. They proposed a parking structure outside the northeast corner of the city wall and integrated into the area of the Sheep Market and the landscape area adjacent to the Muslim cemetery. With access directly off the existing roads, such a parking structure would be practically invisible, and its entrances, ventilation shafts, and skylights could blend in and harmonize with the surrounding structures, such as the Rockefeller Museum.

Teams studying the Old City as a whole from within soon identified the principal issues that have haunted the city's planners. They recognized the need for an overview of the Old City because the different groups of planners employed by the city and various public agencies were looking at separate parts, often without the ability to relate the parts to the whole. For example, the Corporation for the Reconstruction of the Jewish Quarter was charged with rebuilding the quarter and providing it with services. Part of the master plan — the subject of considerable discussion in the planning committees — was a terminal that would provide parking for the residents of the Jewish quarter and a bus stop and truck unloading facilities for both the quarter and some of the markets served from Zion Gate. The master plan proposed that such a structure be located underground but within the Old City, at a point halfway between Zion Gate and Dung Gate. New openings would be broken through or under the wall to connect this terminal with the ring road outside the Old City. Planners of the Jewish quarter did not concern themselves with other quarters, nor did they necessarily consider whether establishing a certain level of services for the Jewish quarter would set a standard to be demanded in time by the residents of the Armenian, Christian, or Muslim quarters. Similarly, Jaffa Gate and the area of Mamilla were the subjects of intensive study. The central government and the municipality had set up KARTA, Central Jerusalem Development Corporation, charged with rebuilding Mamilla. Since 1970 Moshe Safdie and Gilbert Wiel had been developing plans that included parking and terminal facilities outside Jaffa Gate. By the nature of their assignment, they were bound to look more closely at Mamilla than to take a broader overview. For example, KARTA assumed that all bus lines then ending at Jaffa Gate should be accommodated in an underground structure adjacent to the gate; there was no overall assessment as to whether certain lines should terminate at Damascus Gate rather than Jaffa Gate or if some of the lines should not terminate by the gates at all.

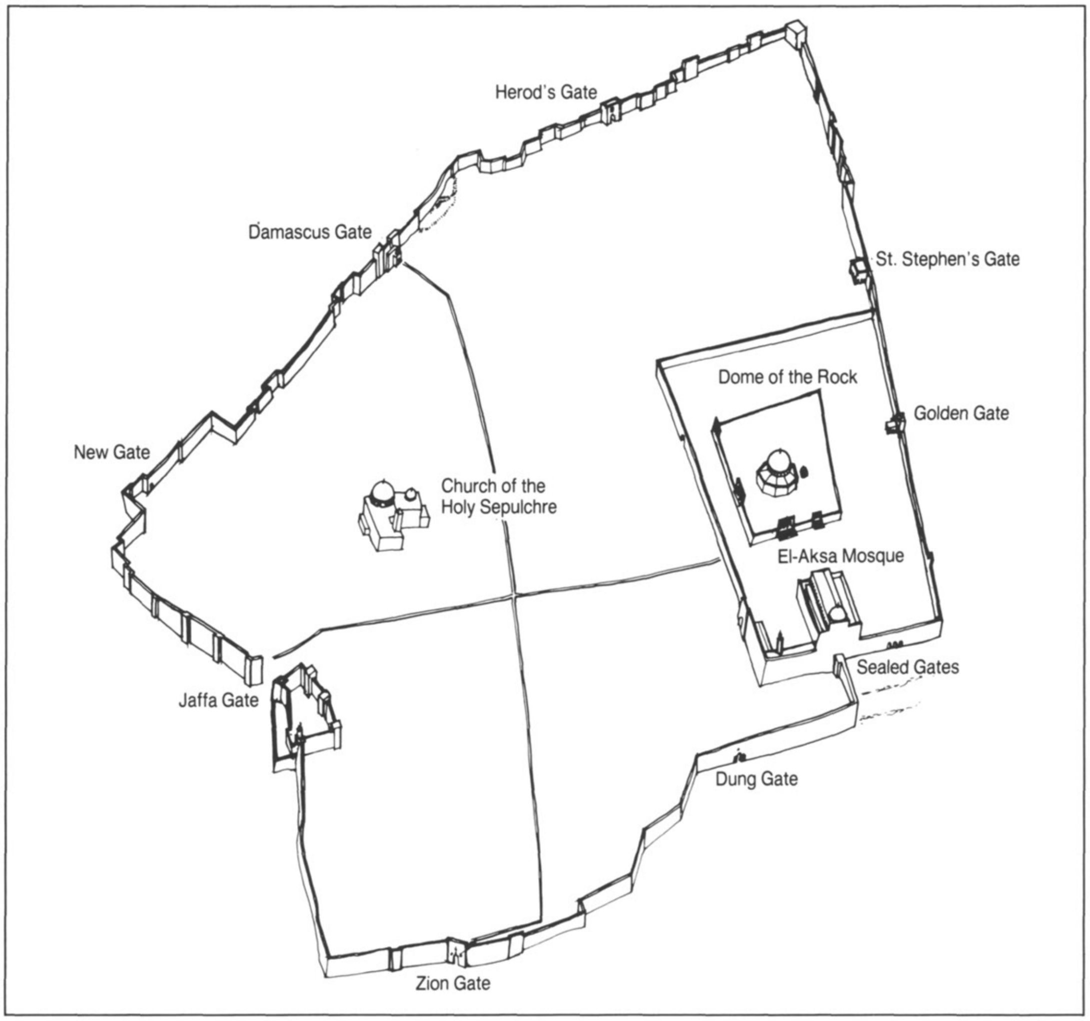
A third agency dealing with the Old City and sections thereof was the Eastern Jerusalem Development Corporation. This corporation was initially charged with renovating and reconstructing the neighborhood of Yemin Moshe, located on the edge of the Hinnom Valley west of the city wall. It was also responsible for installing infrastructure (sewers, water, and so forth) in the Muslim and Christian quarters, redeveloping areas inside and around Damascus Gate, and examining the problems at St. Stephen's Gate. By definition this corporation was unable to take an overview, since its responsibilities overlapped those of the Corporation for the Redevelopment of the Jewish Quarter and KARTA.

The two Harvard teams that embarked on studying the Old City as a totality were on fertile ground. In some ways they were the first to examine all the networks, all the gates, and the relationship of each part to the whole. It was necessary from the outset to analyze and document some of the physical relationships and conditions in the Old City. For example, of the mazes of paths that formed the Old City, some were stepped while others were ramped and sloping without steps. Naturally, those paths that had no steps were easier for carts and other service vehicles to use, so streets without steps were categorized and mapped.

It was clear that over time, by virtue of its geographic position and its relationship to the overall metropolitan area, each gate had developed a specific role. For example, the northern and western gates are closest to the new city. Jaffa Gate became the principal entrance for tourists and Jewish pilgrims, as well as a point of access to the Armenian and Jewish quarters; tourist parking and buses tended to be concentrated there. Damascus Gate, on the other hand, was the principal gateway to the residential and commercial areas of the Arab population, serving the markets of the Old City; it was the point of delivery of merchandise and a terminal point for the bus and *sherut* (shared taxi) system. Herod's Gate played a similar but minor role, whereas St. Stephen's Gate served primarily as a pilgrimage gate for both Christians and Muslims. On the other hand, since St. Stephen's Gate could be entered by vehicles, it became a point of entry for vehicles delivering goods to the markets. The situation was similar to that of Jaffa Gate, which had been modified by the Ottomans to allow vehicular entry on the occasion of the visit of Kaiser Wilhelm in 1898. Damascus Gate and Herod's Gate, which were inaccessible to cars, became major points of pedestrian entry. Zion Gate, on the other hand, played a minor role and provided little access at all. New Gate was opened through the wall approximately a hundred years ago and was a minor access point to the Christian quarter and connected the quarter with the Christian institutions outside.

The teams reached similar conclusions about the gates and suggested reinforcing their present roles by improving services, which would also help achieve an environment compatible with the objectives of preservation. Thus, parking facilities were proposed for Jaffa and Damascus gates as well as for St. Stephen's Gate. Bus facilities and parking for pilgrims were also proposed for Dung Gate. Various studies were carried out to illustrate how this could be achieved. One series of sketches proposed parking outside Dung Gate, counteracted by a landscape garden immediately inside the gate; others demonstrated a variety of methods by which parking could be provided at St. Stephen's Gate.

**2.38**



**2.38** *Axonometric diagram of the Old City showing the division of the city into four principal quarters with access via seven gates.*

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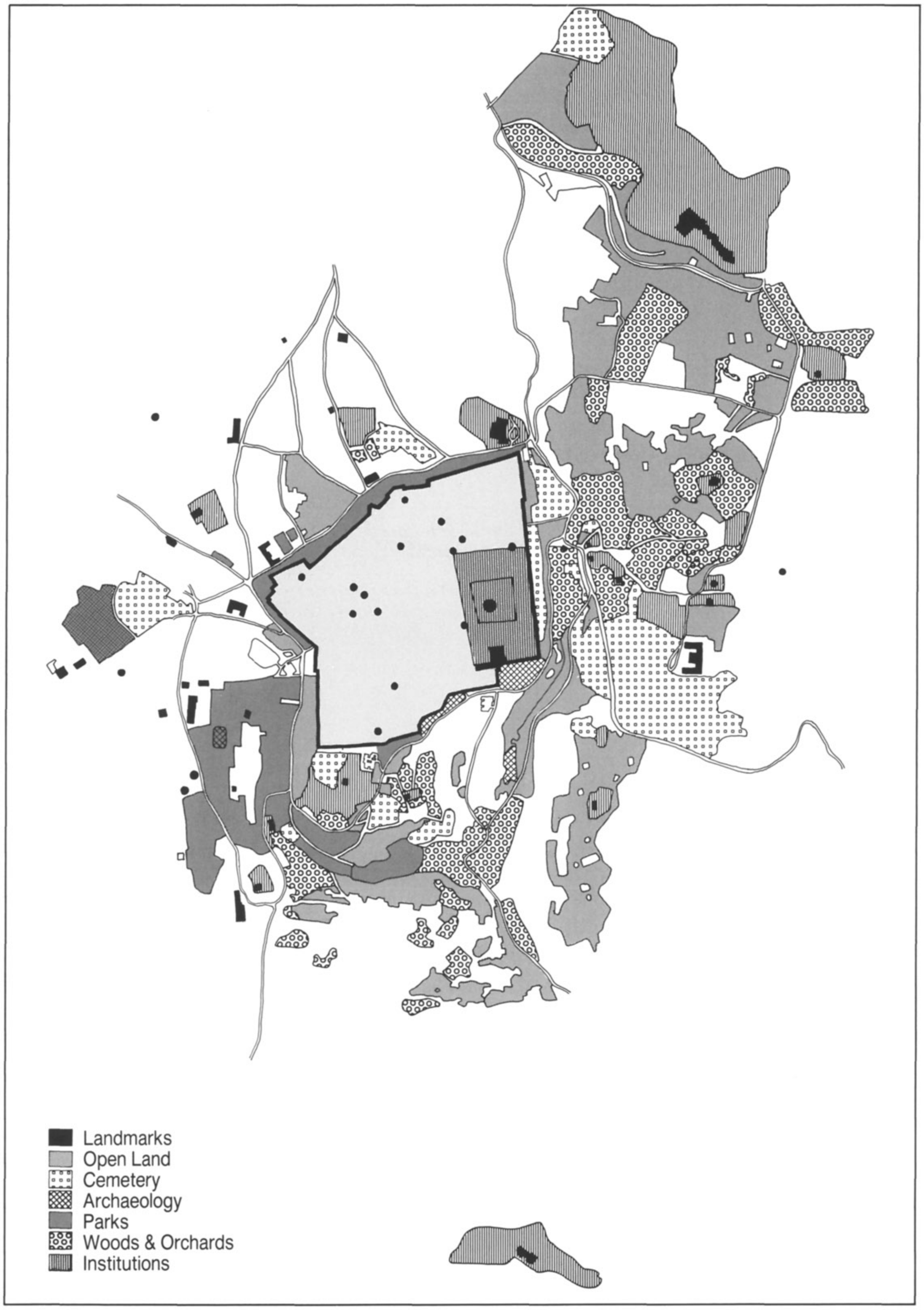
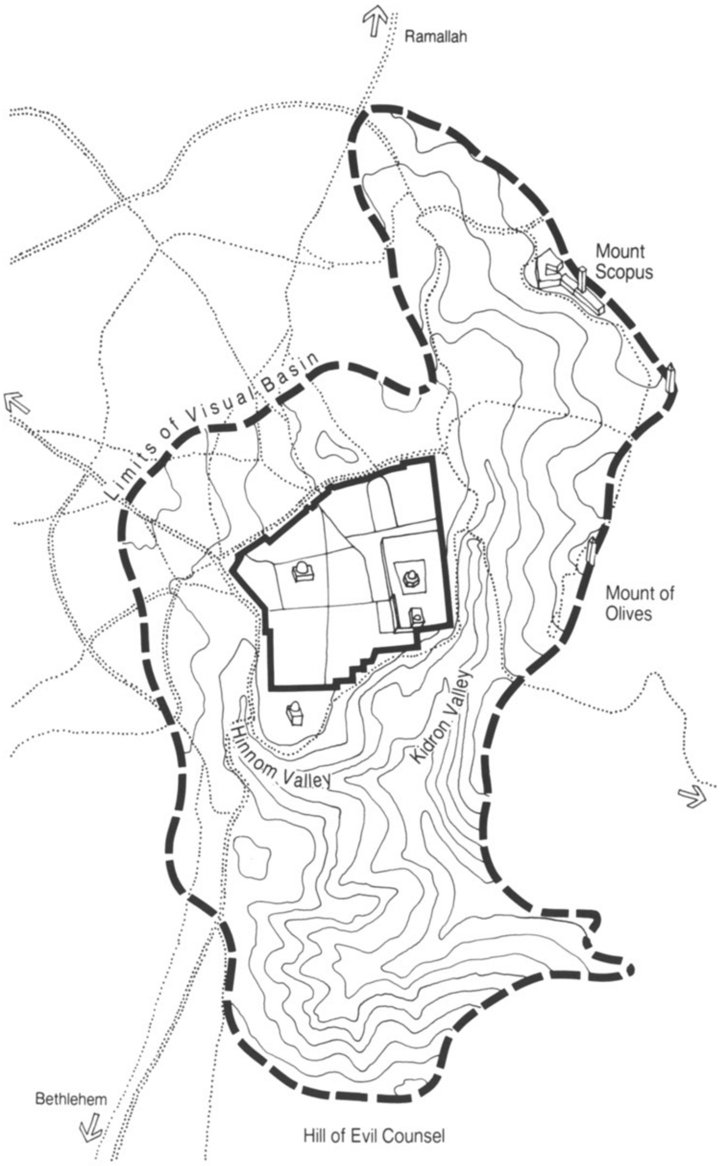


**2.39** *Detailed proposal illustrating possible treatment of the area leading from the base of the Kidron Valley up to Wadi Joz and to the northwest corner of the Old City (Ix, M. Johnson, T. Johnson, Smithson).*

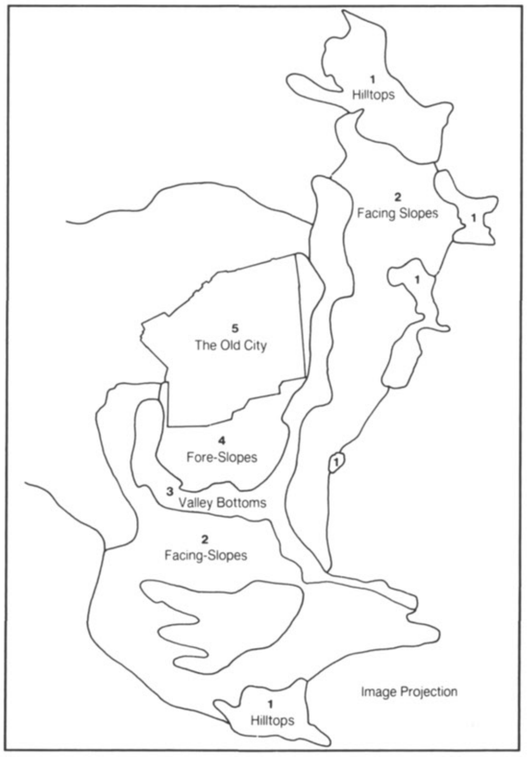
**2.40**



**2.40** *Diagram of the extent and limits of the visual basin. The key components of the timeless image still exist — the prominent wall, rugged valleys with patches of orchards and small terraced fields, ancient cemeteries, landmarks, and institutions on hilltops (Ix, M. Johnson, T. Johnson, Smithson).*

**2.41** *Proposal to divide the visual basin into five planning zones for the protection of the Old City's imagery. These five areas are 1. hilltops, 2. facing slopes, 3. valley bottoms, 4. the highly critical foreslopes, and 5. the Old City as one compact unit (Ix, M. Johnson, T. Johnson, Smithson).*

**2.41**



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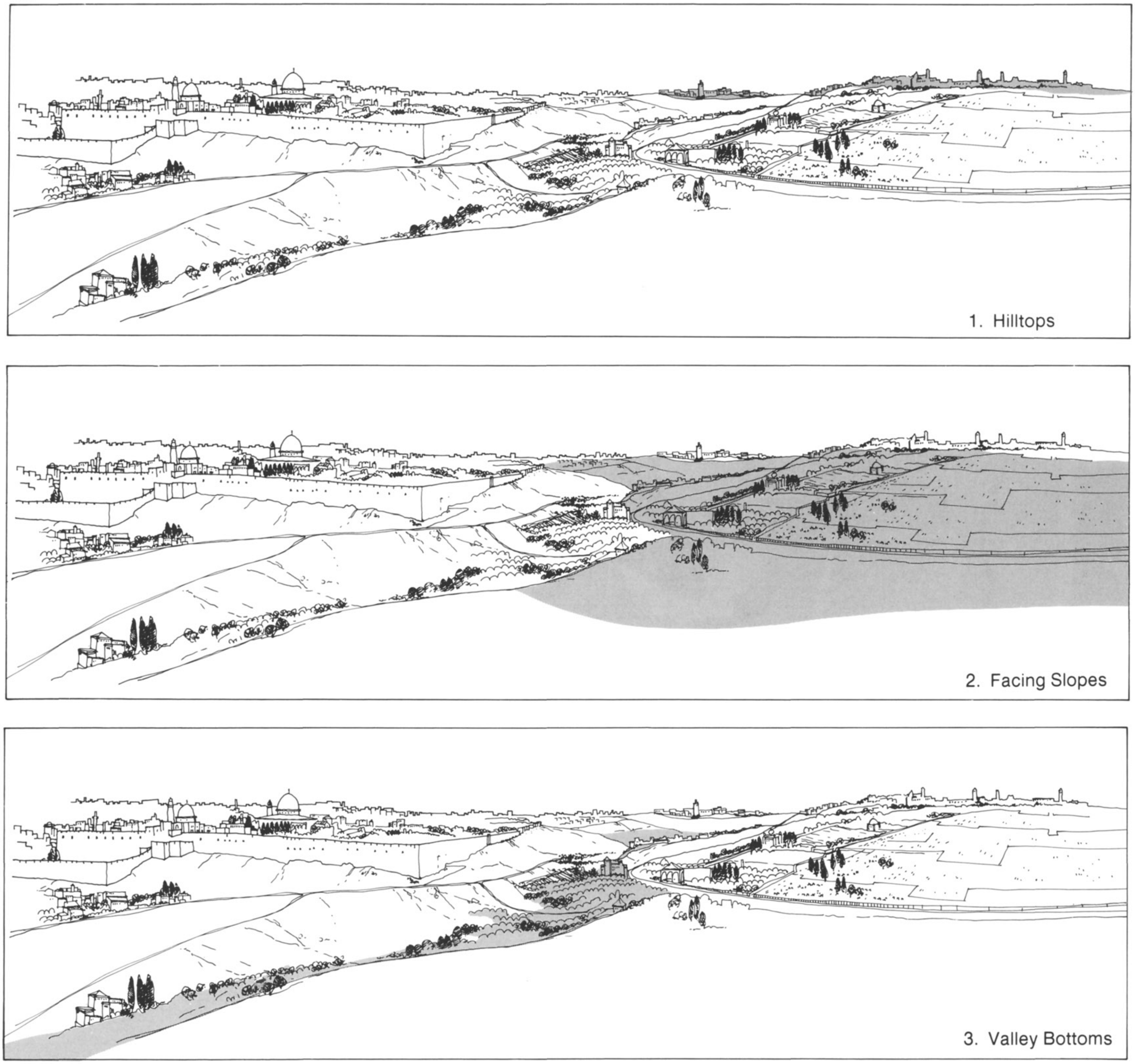
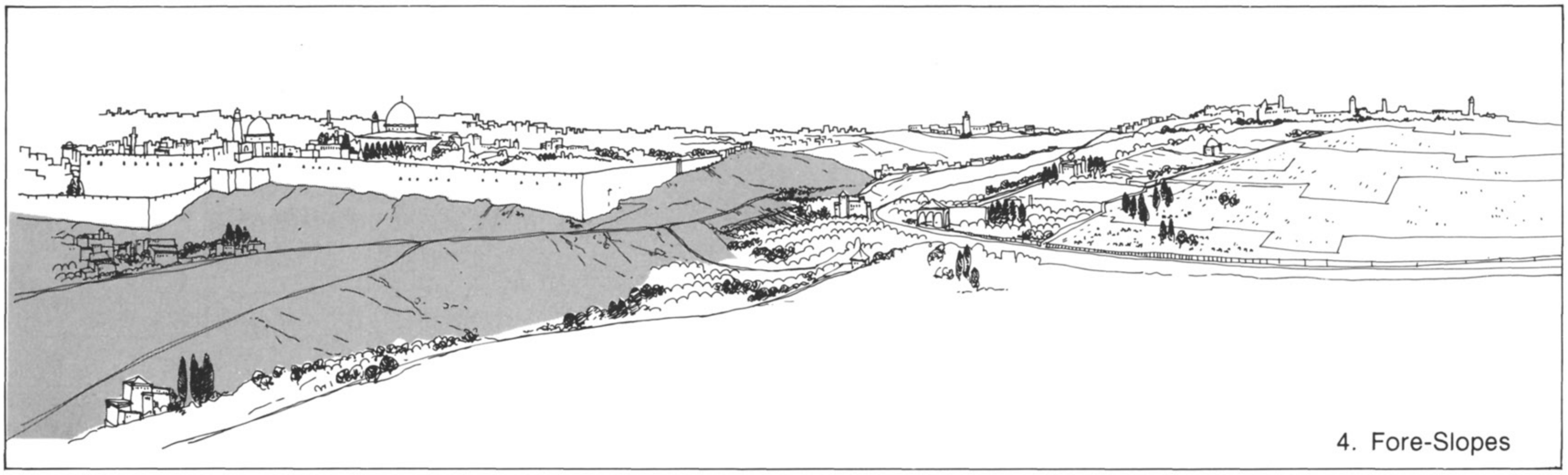
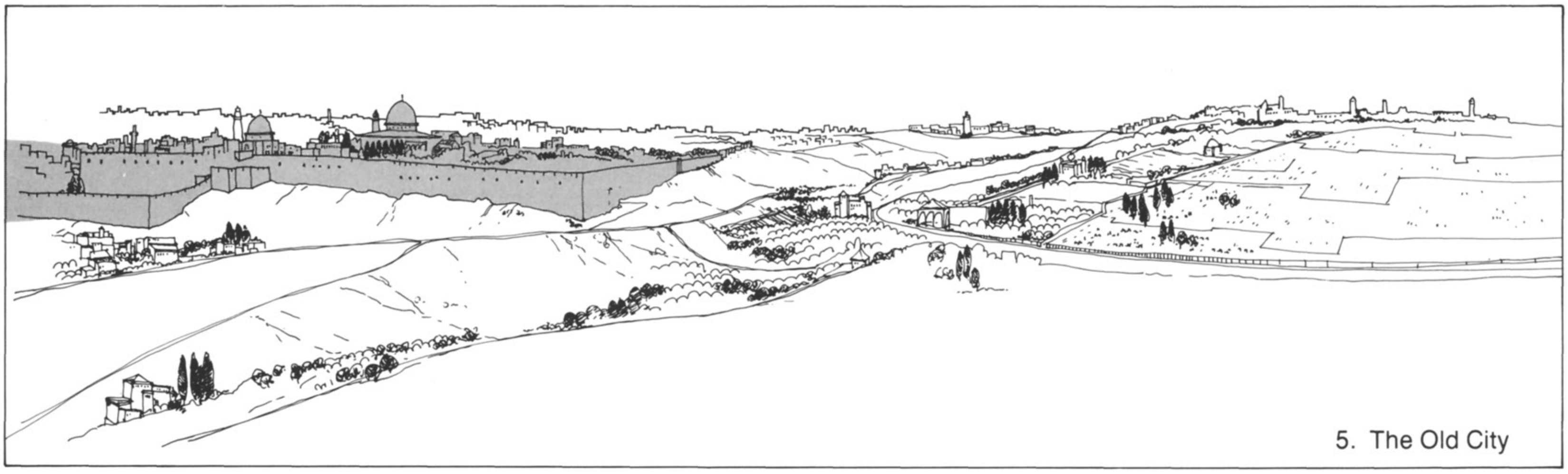


1. Hilltops

2. Facing Slopes

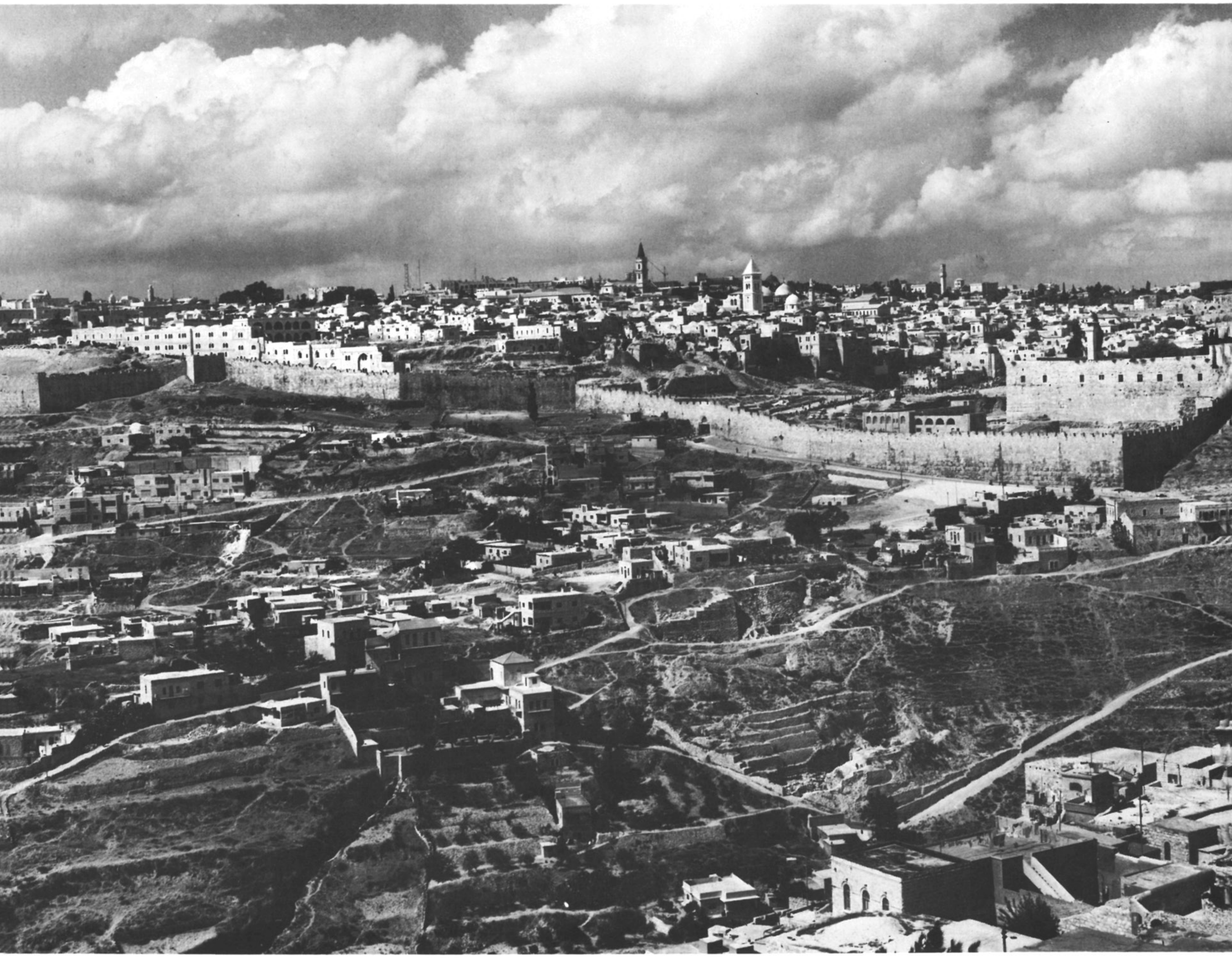
3. Valley Bottoms

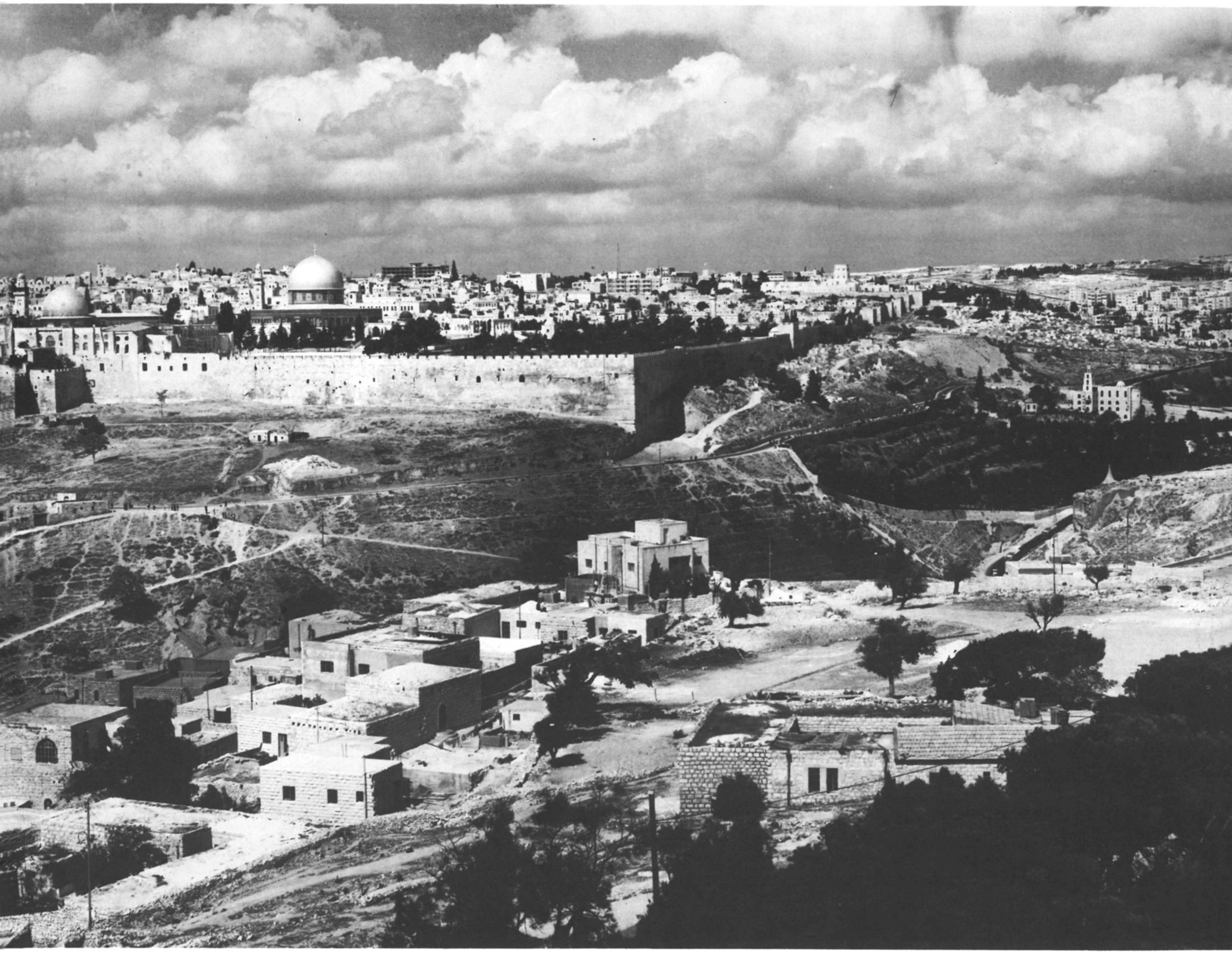




**2.42** *(Overleaf) The skyline of the Old City as it sits upon the broad expanse of the wall.*

2.4 2





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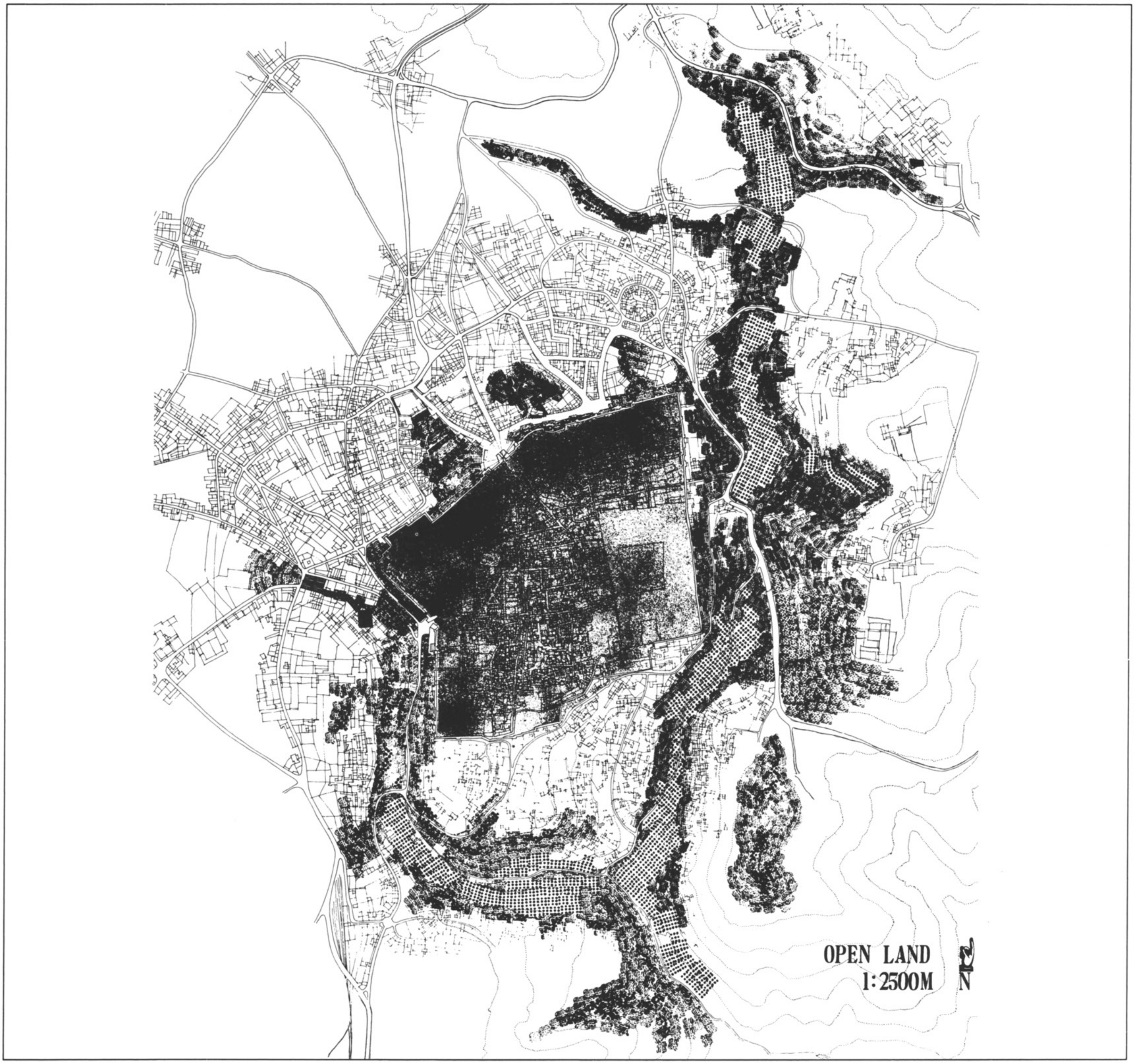

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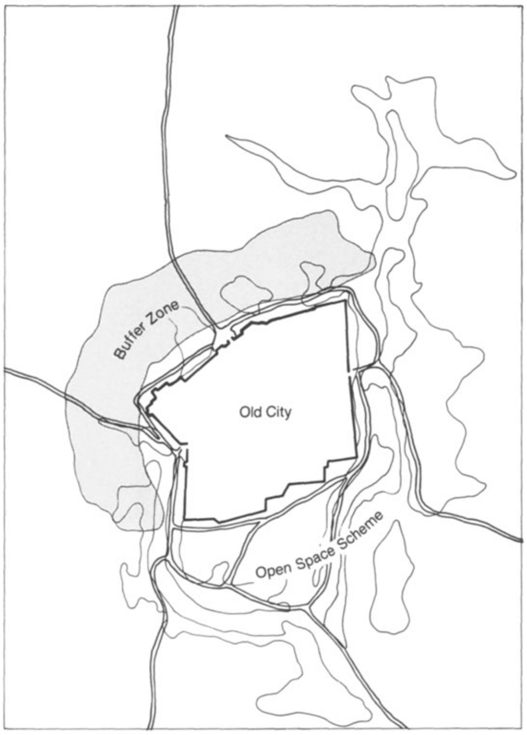
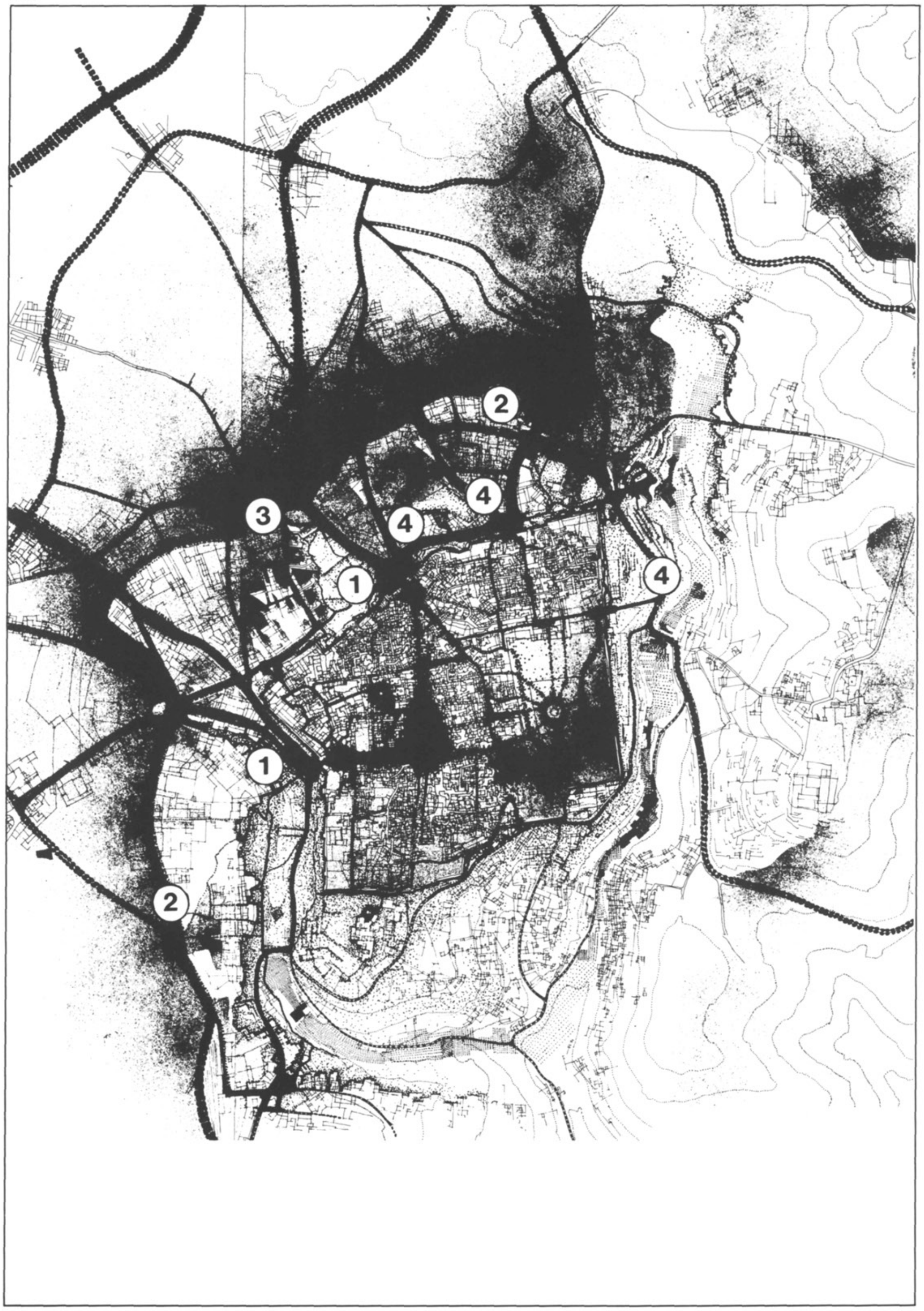


**2.43** *Proposal to develop an open-space system in the environs of the Old City to create a clearer edge between the "built Jerusalem" and the "Jerusalem in the landscape." A greater distinction would be made between the green belt along the northern ridge of the walls and the rural landscape to the east and south (Ix, M. Johnson, T. Johnson, Smithson).*

**2.44** *Diagram illustrating the relationship of the Old City to its two adjacent and dissimilar surroundings — an urban side to the north and west, a rural side to the south and east (Ix, M. Johnson, T. Johnson, Smithson).*

**2.45** *Principal components of a transitional zone surrounding the Old City on the north and west include: creation of a buffer zone by transforming the area immediately adjacent to the north and west walls into an extension of the Old City; diversion of all traffic not destined for the Old City through a system of outer ring roads connecting the old and new cities; creation of a new road connecting the Arab and Jewish commercial areas as the focus of future commercial development; and selective filtering of bus, truck, car and pedestrian traffic in an attempt to recapture the devotional experience of the approach (Ix, M. Johnson, T. Johnson, Smithson).*

**2.45**



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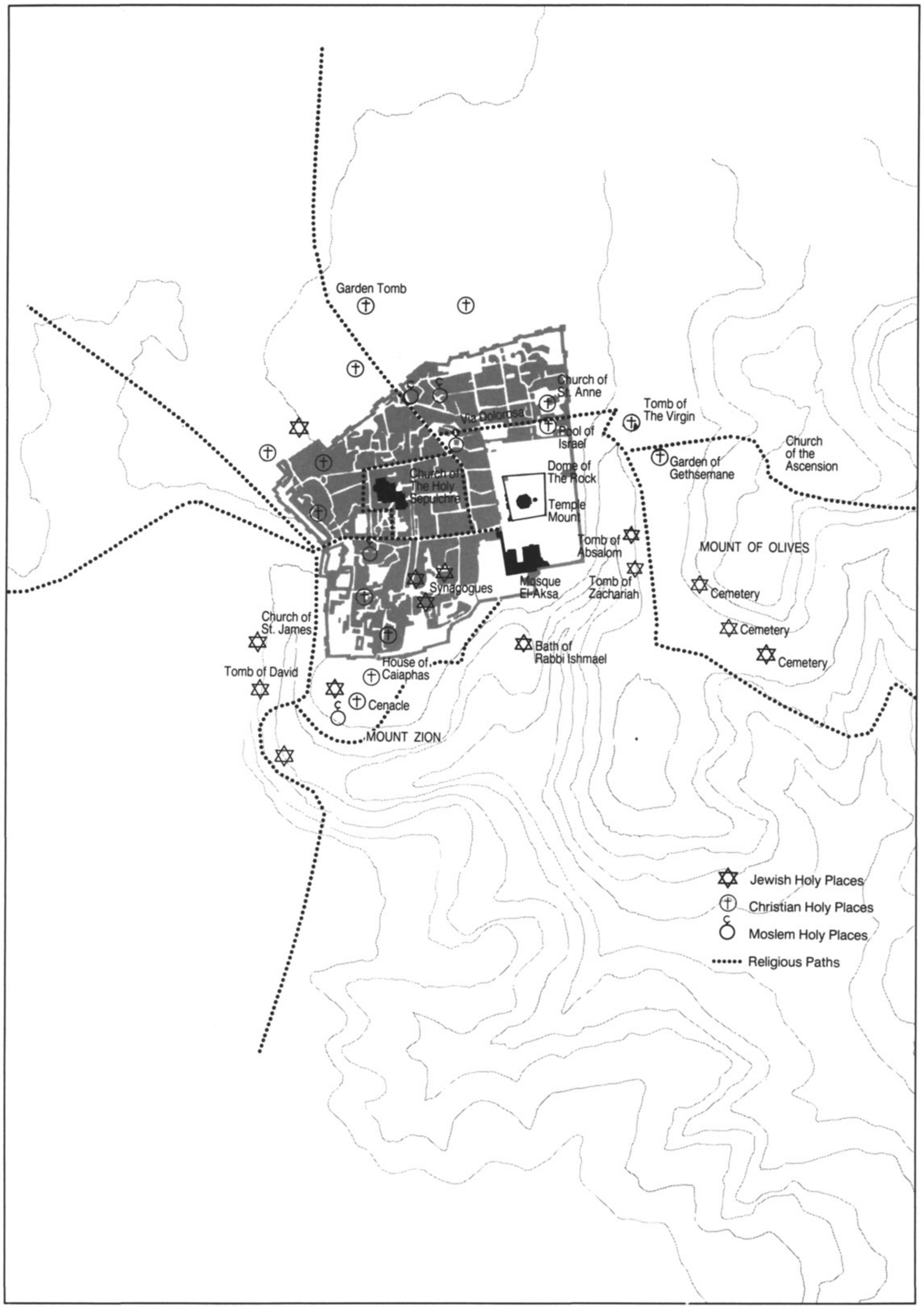


**2.46** *Diagram depicting ritual pathways and places of pilgrimage in the environs of the Old City.*

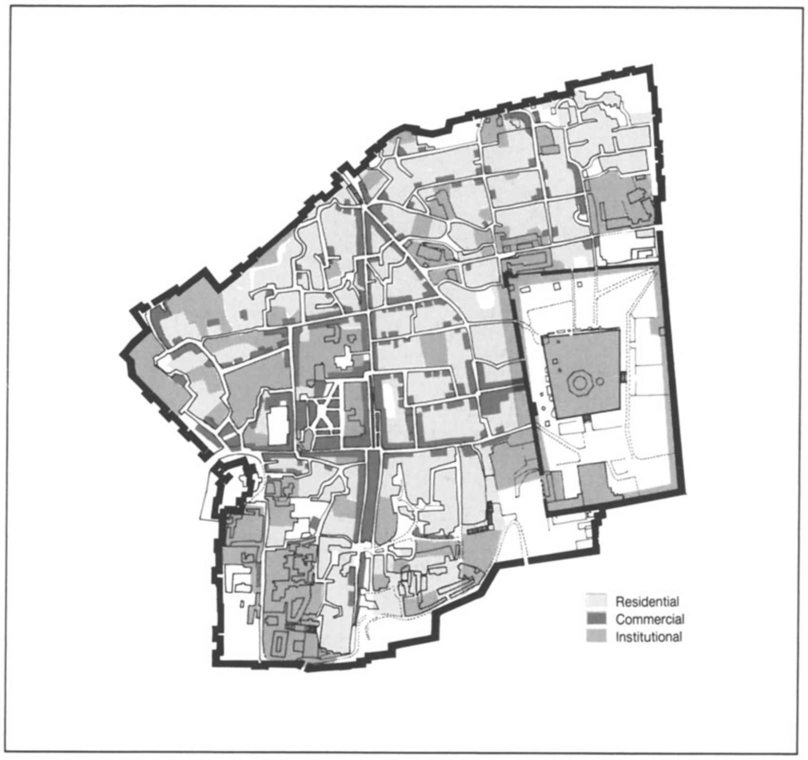
**2.47** *Existing land uses.*

**2.48** *Density of population.*

**2.49** *Topography.*

**2.50** *Figure–ground.*

2.47



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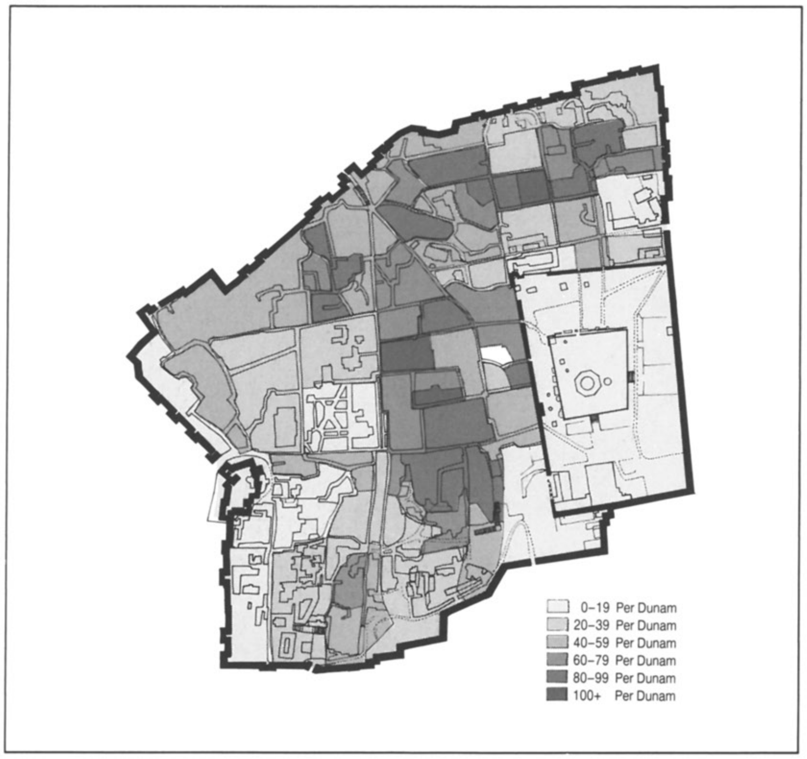

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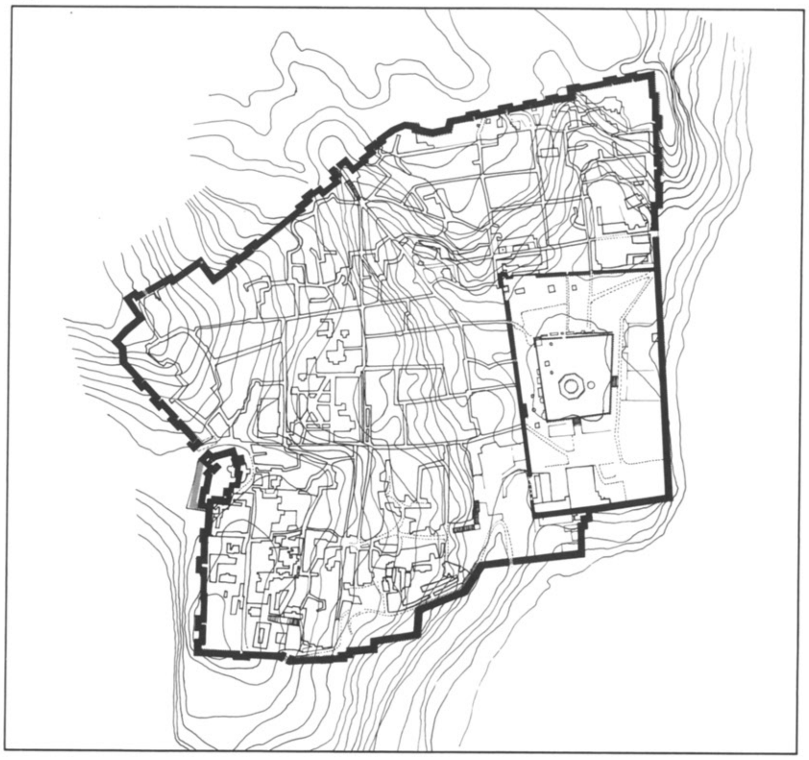

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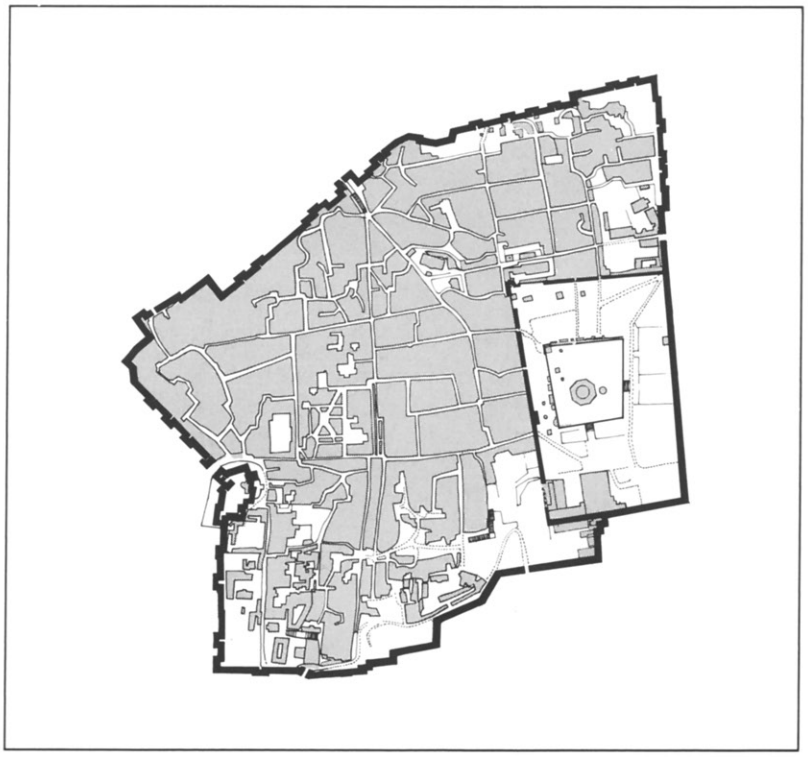

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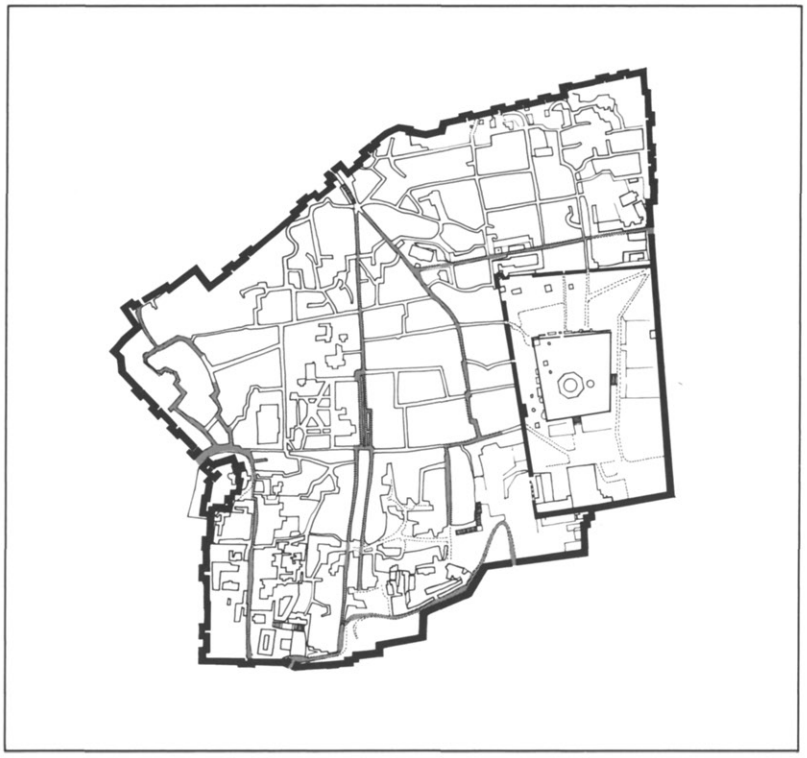

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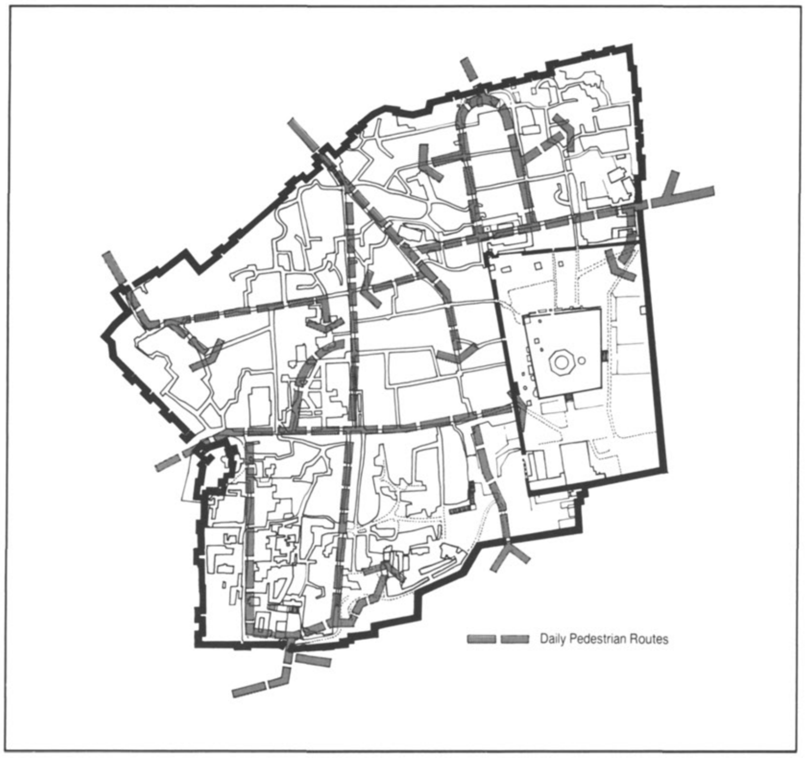

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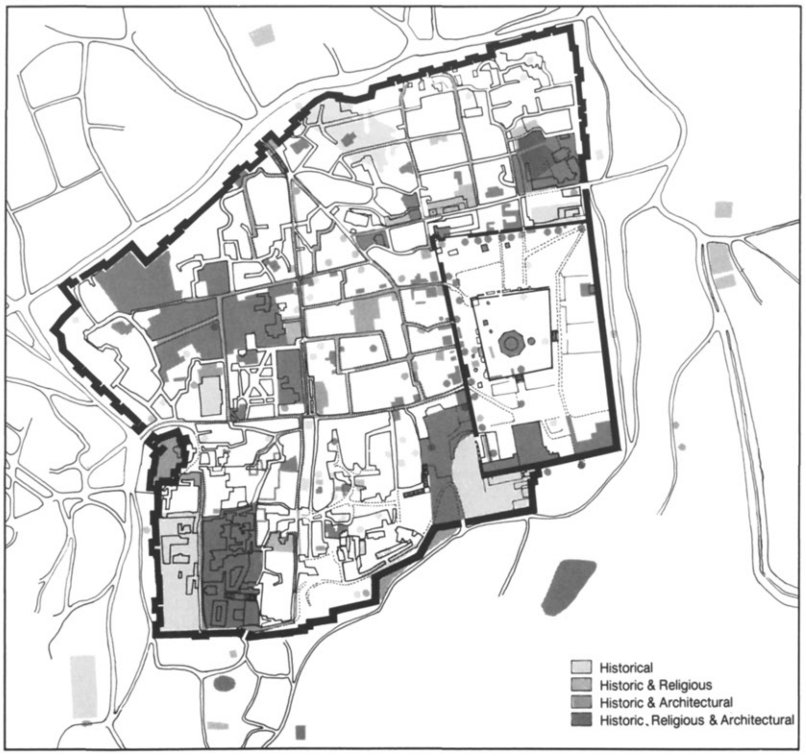

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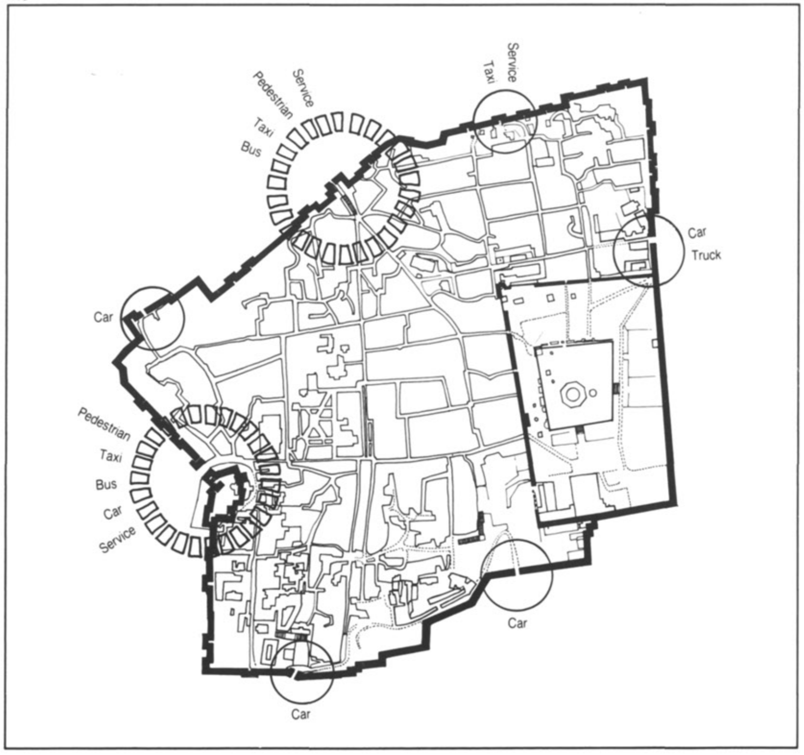

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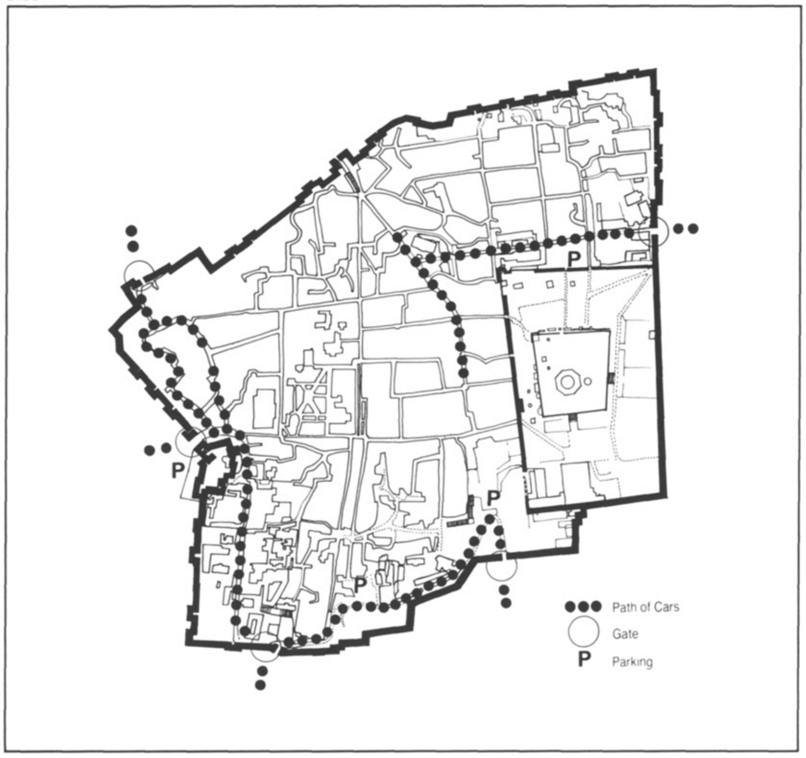

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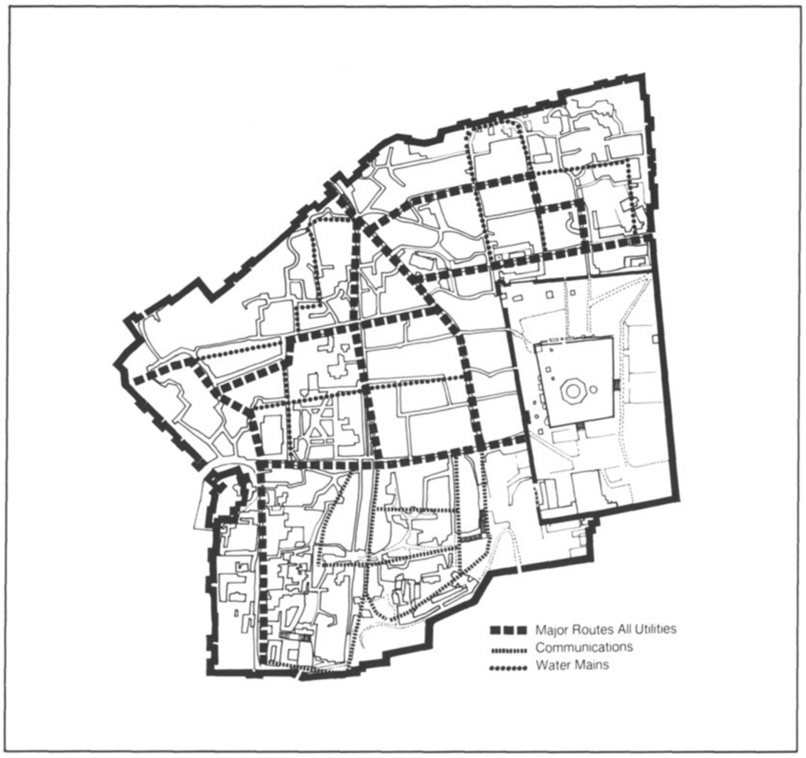

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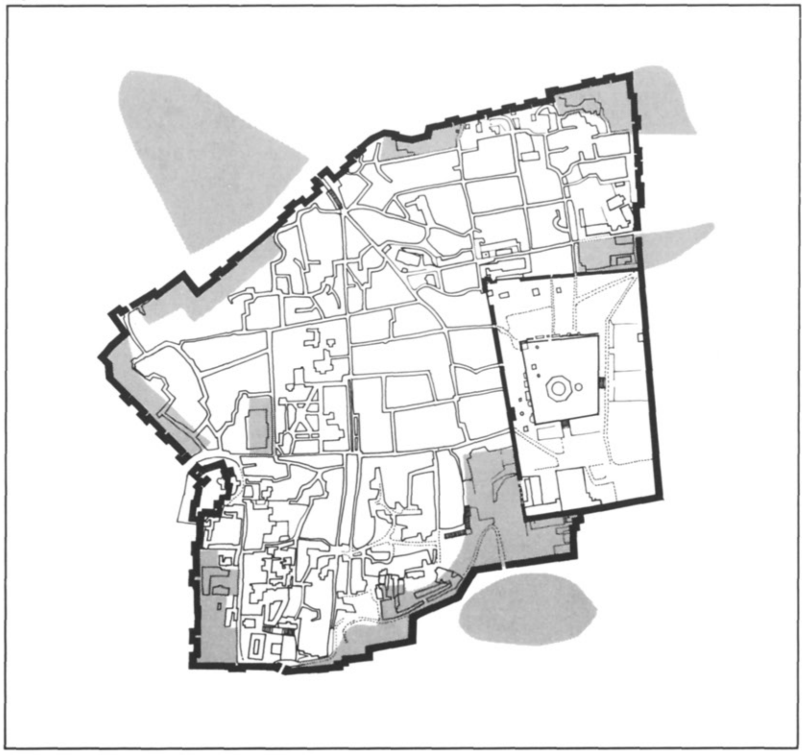


**2.51** *Streets without steps.*

**2.52** *Pedestrian movement.*

**2.53** *Historical monuments and areas.*

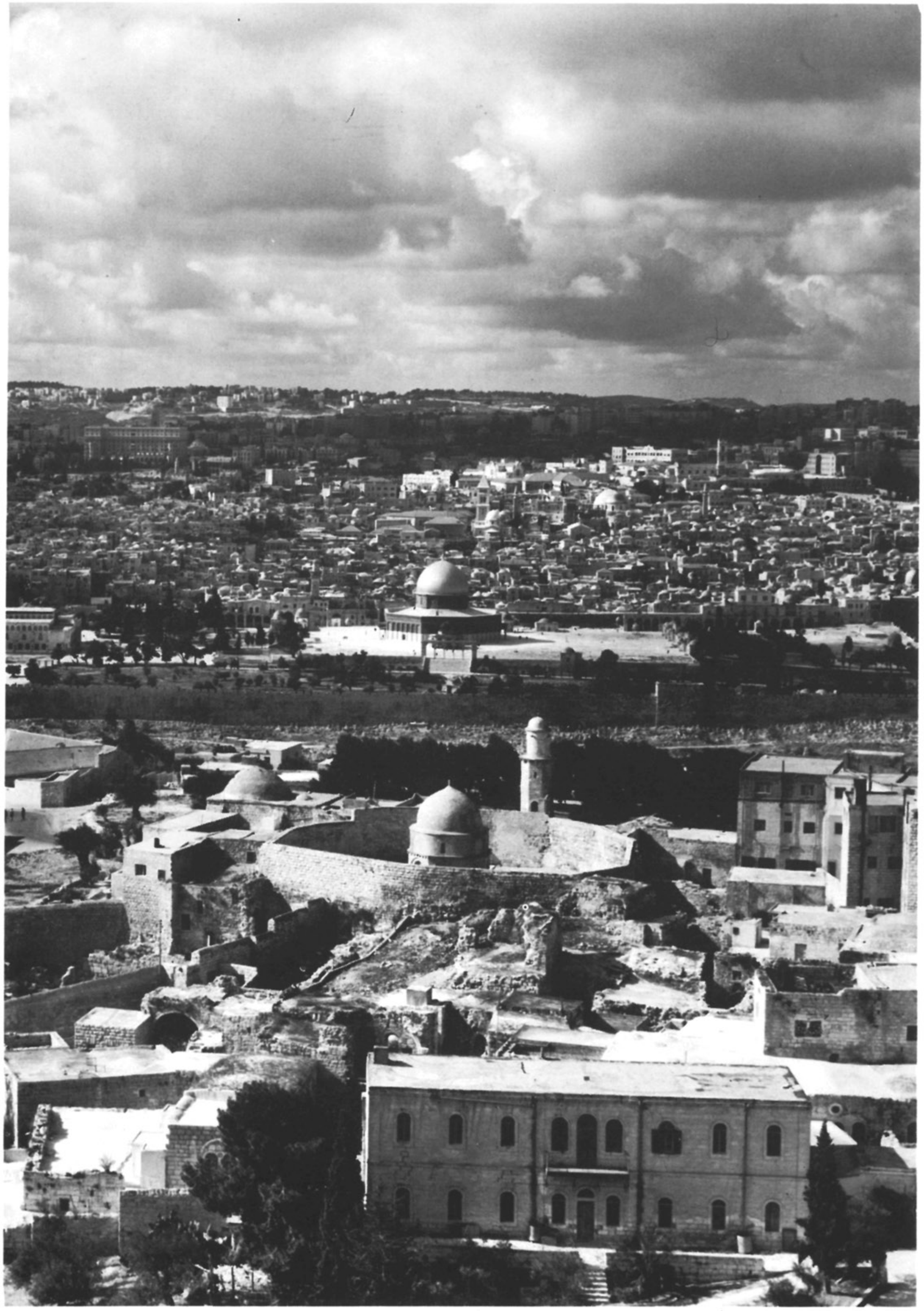
**2.54** *Existing character of the gates.*

**2.55** *Areas of automobile penetration.*

**2.56** *Utilities and services.*

**2.57** *Potential area for parking inside and immediately outside the walls.*

2.58



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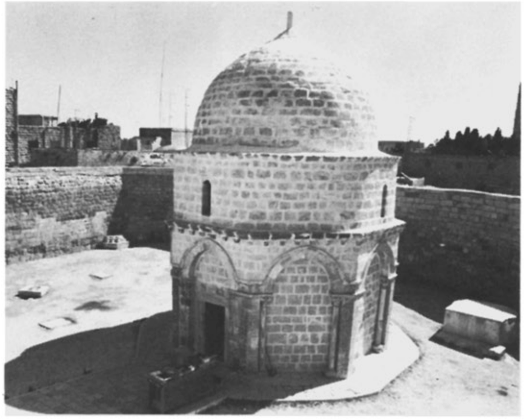

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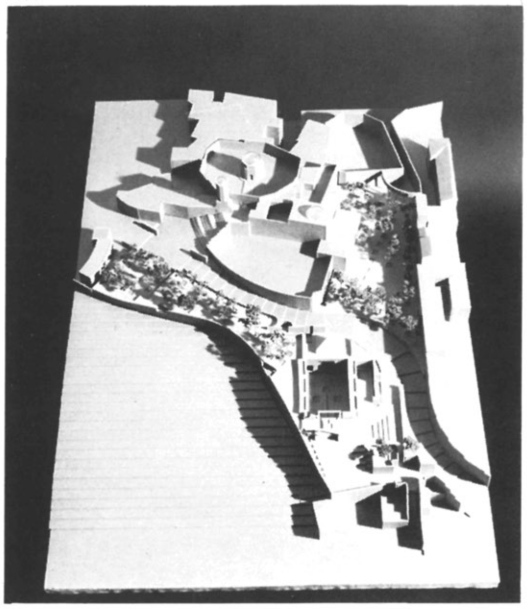


**2.58** *Located at one of the principal gateways into the visual basin, the Chapel of the Ascension intercepts the Palm Sunday processional route from Bethesda over the Mount of Olives into the Garden of Gethsemane. The location of the Chapel offers breathtaking vistas, yet it is cut off from its surroundings by heavily trafficked roads.*

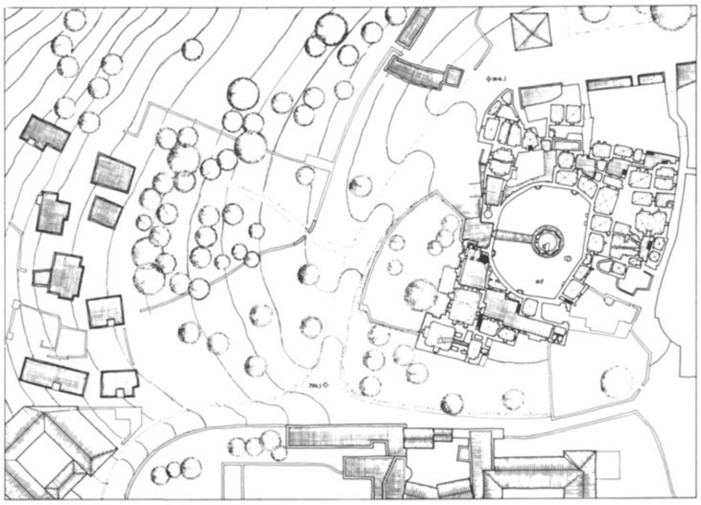
**2.59** *The chapel, which dates from the fourth century was transformed into a mosque in 1187. Today, Christians are permitted to hold rites here on their respective celebrations.*

**2.60** *Model view of proposal showing the sequence of pilgrimage places (DePace).*

**2.61** *Site plan of existing conditions (DePace).*

**2.62** *Proposal to extend the space around the chapel by creating a plaza in front, which would lead the pilgrim toward a terraced garden of spaces for both interior reflection and outward contemplation prior to descending into the valley (DePace).*

**2.61**



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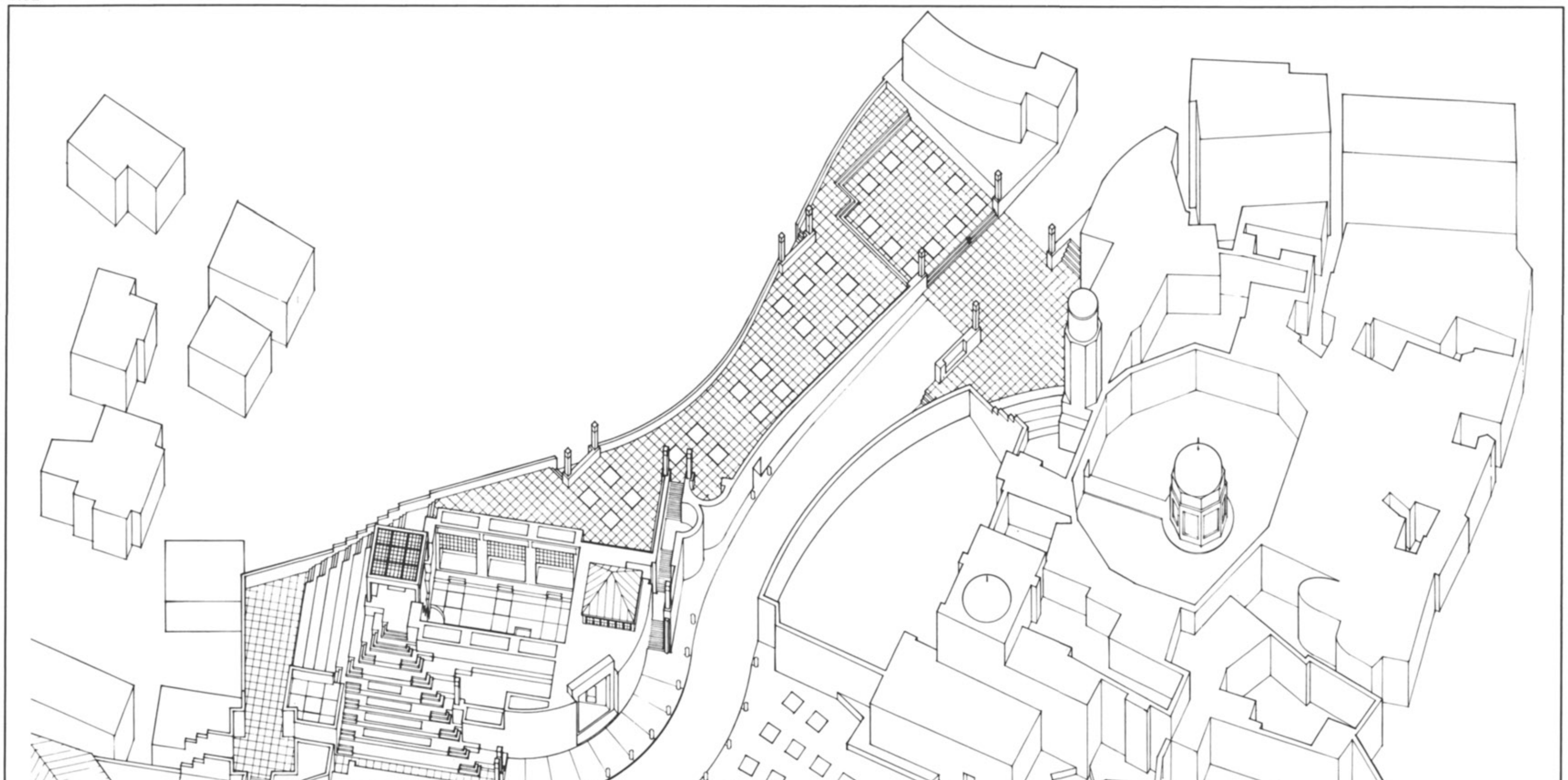

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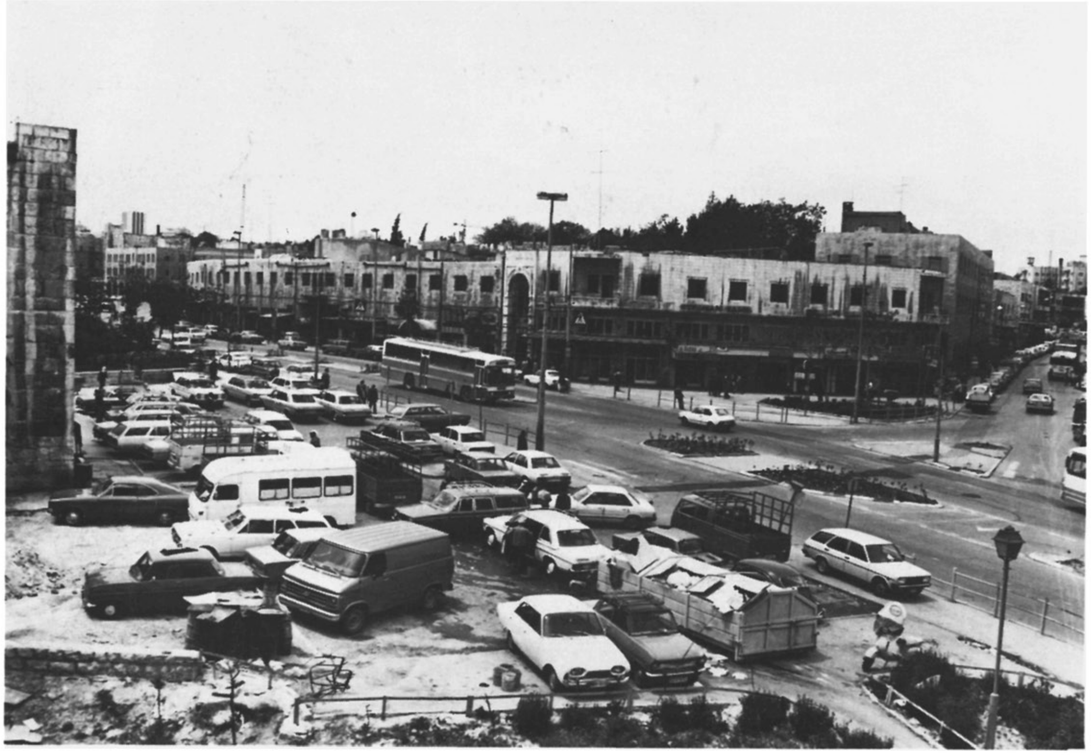

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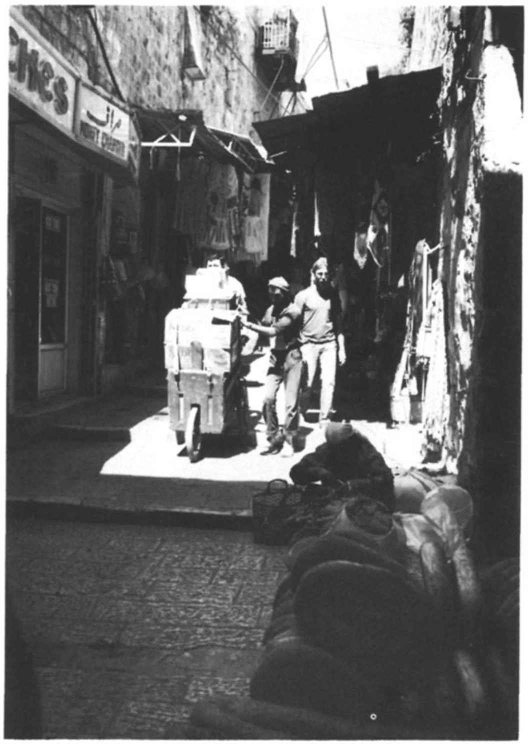

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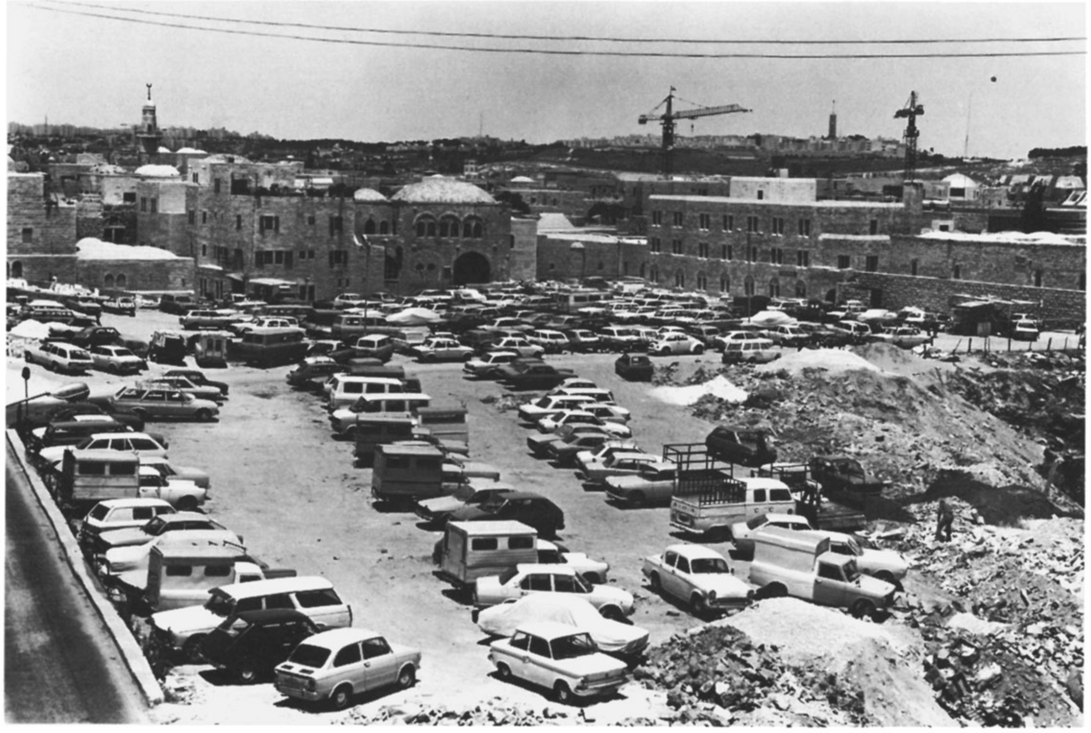
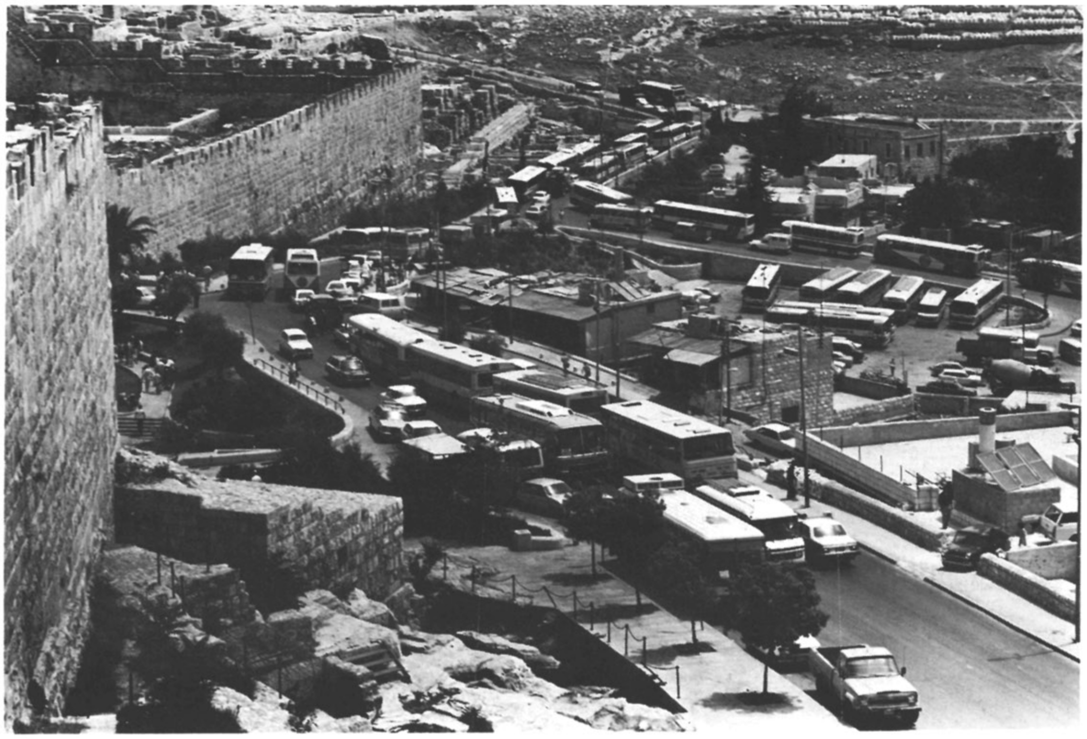


**2.63** *Since the gates are the only connectors between life inside and out, contemporary living demands that parking and services be accommodated at these points. Congestion is a fact of life as cars, taxis, buses, trucks, and burdened animals compete for limited space.*

**2.64** *One of the few organized parking lots within the walls exists at the edge of the Jewish quarter. As the city's residents become more affluent, there will be additional pressure to accommodate parking in other quarters.*

**2.65** *The sheer demands of servicing 24,000 residents in the Old City, where motor traffic is practically an impossibility, means most of the transport must be transferred from trucks to, in most cases, human power.*

2.66



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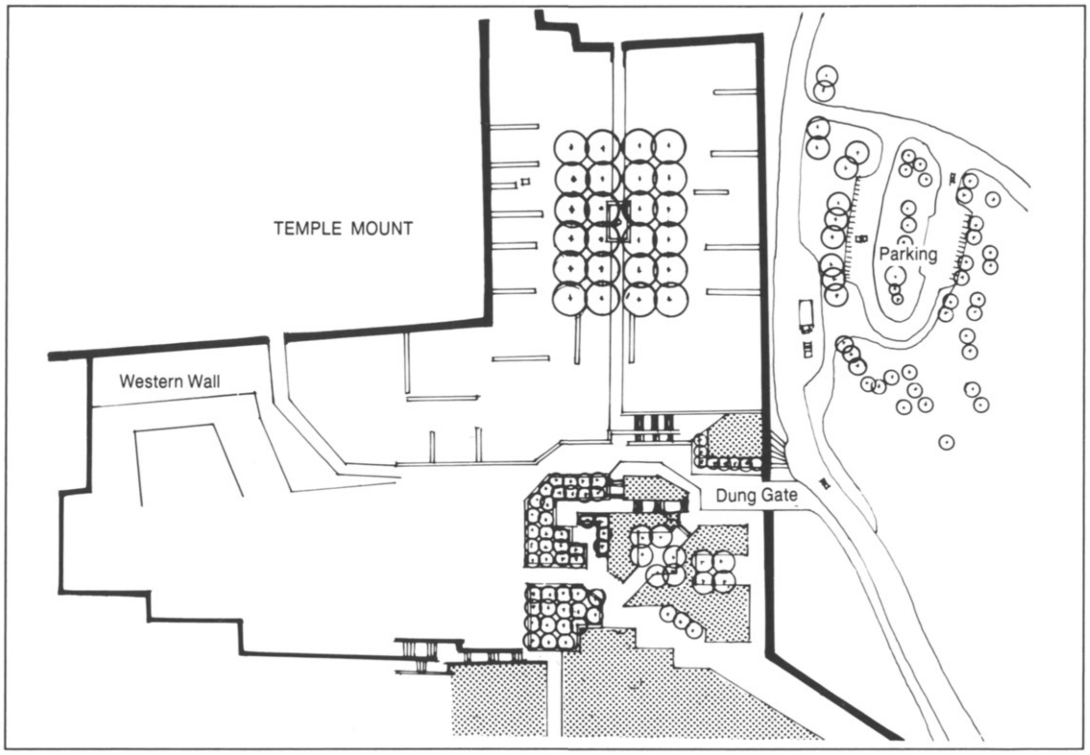


**2.66** *A view outside Dung Gate, 1983.*

**2.67** *Proposal for a garden with underground parking immediately inside the Dung Gate (McCobb).*

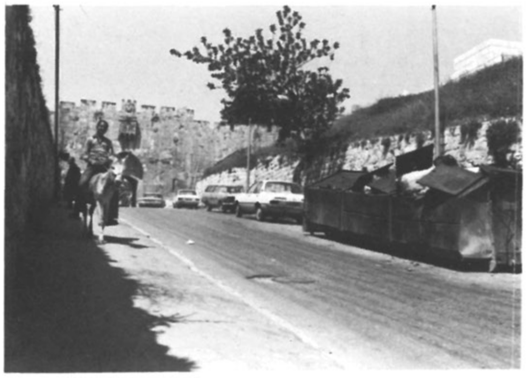
A third team proposed that the parking and transportation facilities be accommodated outside the walls adjacent to the Rockefeller Museum and next to the live market. The proposal demonstrated how three levels of parking could be integrated into the landscape adjacent to the Muslim cemetery; the parking facility would be almost invisible from the surrounding areas, with structures linking it to the Rockefeller Museum and the Muslim community that lies to the north. To link the car park to the gate, a distance of 850 feet, the team proposed a promenade running along the wall between the cemetery and the wall itself, overlooking Mount Scopus and the Mount of Olives to the east. This promenade would extend the walking distance for those coming to the Old City by a considerable distance, but it would avoid the extreme difficulty of providing parking immediately adjacent to the gate within the steeply sloping terrain.

The two teams proposing parking at the gates recognized that from a social and economic point of view, the wall had become an artificial barrier. It separated, for example, Arab residences in the Muslim quarter from those located immediately outside it and from the commercial area around Rockefeller Museum. Similarly, it artificially divided Old City markets and the commercial facilities immediately outside the gate along Salah el Din and Suleiman streets. The wall also separated the Armenians in their quarter from their church on Mount Zion. Thus both teams concluded that the western and northern edges of the wall be used to reinforce the connectivity and continuity of development inside and outside the Old City.

But the teams differed radically in the symbolic and practical meanings they assigned to the city wall itself. One team, consisting of Eric Koh, Patricia McCobb, Noni Siegel, and Shunsuki Takahashi, concluded that the wall was sacrosanct; it should not be tampered with, and all connections should take place through the existing gates. The other team, composed of Sally Baer, Azra Hameed, Joe Runco, and Wesley Salley, reached an opposite conclusion: they recommended that the wall remain as an artifact that could be penetrated at many points, allowing life inside and outside the walls to go on with a minimum of separation. For example, apertures in the eastern wall would allow children in the Muslim quarter to use the open space outside the wall as playgrounds. An aperture in the northern wall would create several opportunities for pedestrians to connect the Muslim quarter with the institutions and development near Damascus Gate. These proposals claimed that maximizing connections would, in the long run, enhance life in the Old City and spark development outside the walls that would form an integral part of the life within it. Those opposing such proposals believed that they would dilute and compromise the roles that the gates have played in the life of the city for centuries, that the gates would become less significant, and that the network of paths serving the city focusing upon the gates would cease to function in its present mode. Other paths presently not exposed to intensive circulation would be transformed in character next to the new openings. They concluded that any intervention in the status quo was undesirable and that the gates should continue to be the sole access into the city.

In many ways the St. Stephen's Gate area is an example of both the problems of and the opportunities for the restoration of the Old City. The gate has a special place in the ceremonial life of both the Christian and the Muslim communities. It is a principal entry point to the Via Dolorosa, the stations of the cross, leading to the Holy Sepulchre. It forms part of the sequence that pilgrims traverse from the holy places on the Mount of Olives to the Old City. It is also an important entry point to Harem el Sharif, the Temple Mount, used particularly on the significant holidays when tens of thousands of Muslims flock to Jerusalem from the entire region.

**2.68**

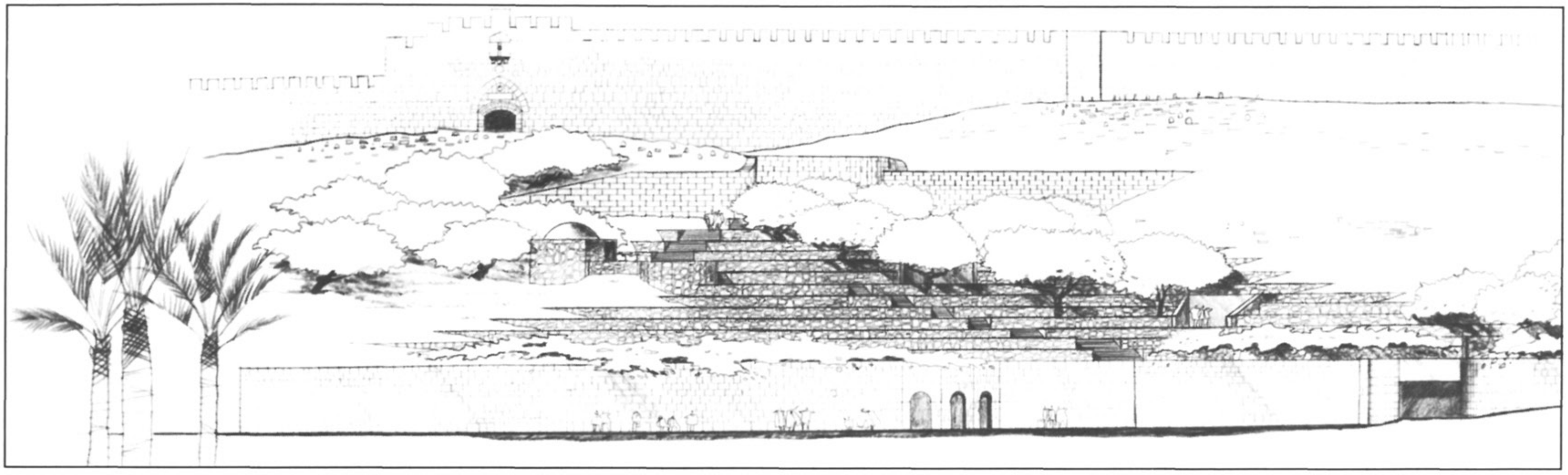


**2.68** *As the only entrance to the city from the east, the ritual approach through St. Stephen's Gate was an embarrassment at the time of the study. Thousands of Christian and Muslim pilgrims had to pass parked cars, tour buses, garbage, and other debris before retracing the steps of Jesus on the Via Dolorosa or before passing through the Gate of the Tribes into the Haram es Sharif.*

**2.69** *Proposal for the reconstruction of the entry of St. Stephen's Gate, including the relocation of parking and service elements plus exhibition space and gardens terraced into the hillside (Hagstette, Shamsuri).*

**2.70** *Plan view of proposal (Hagstette, Shamsuri).*

2.69



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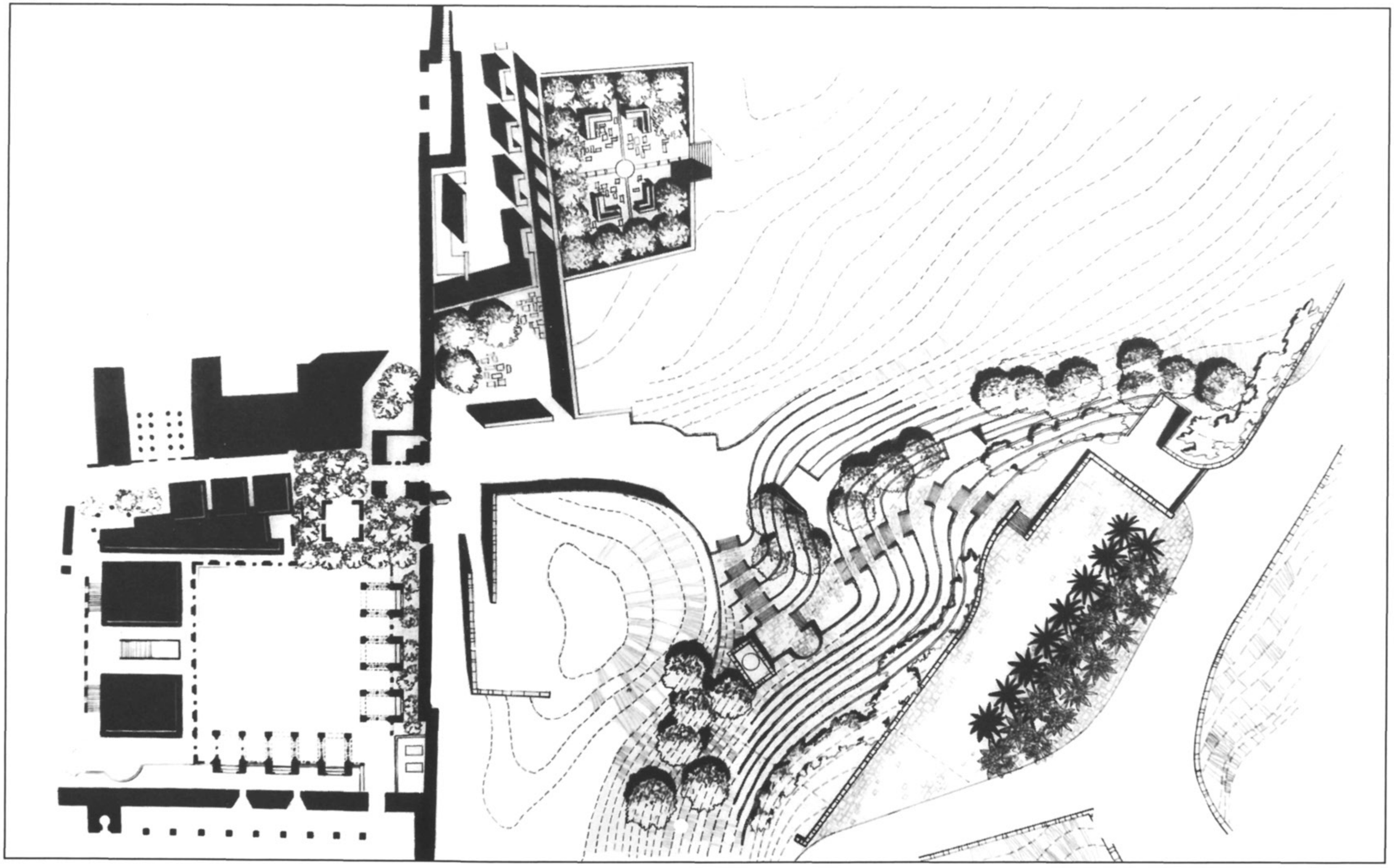
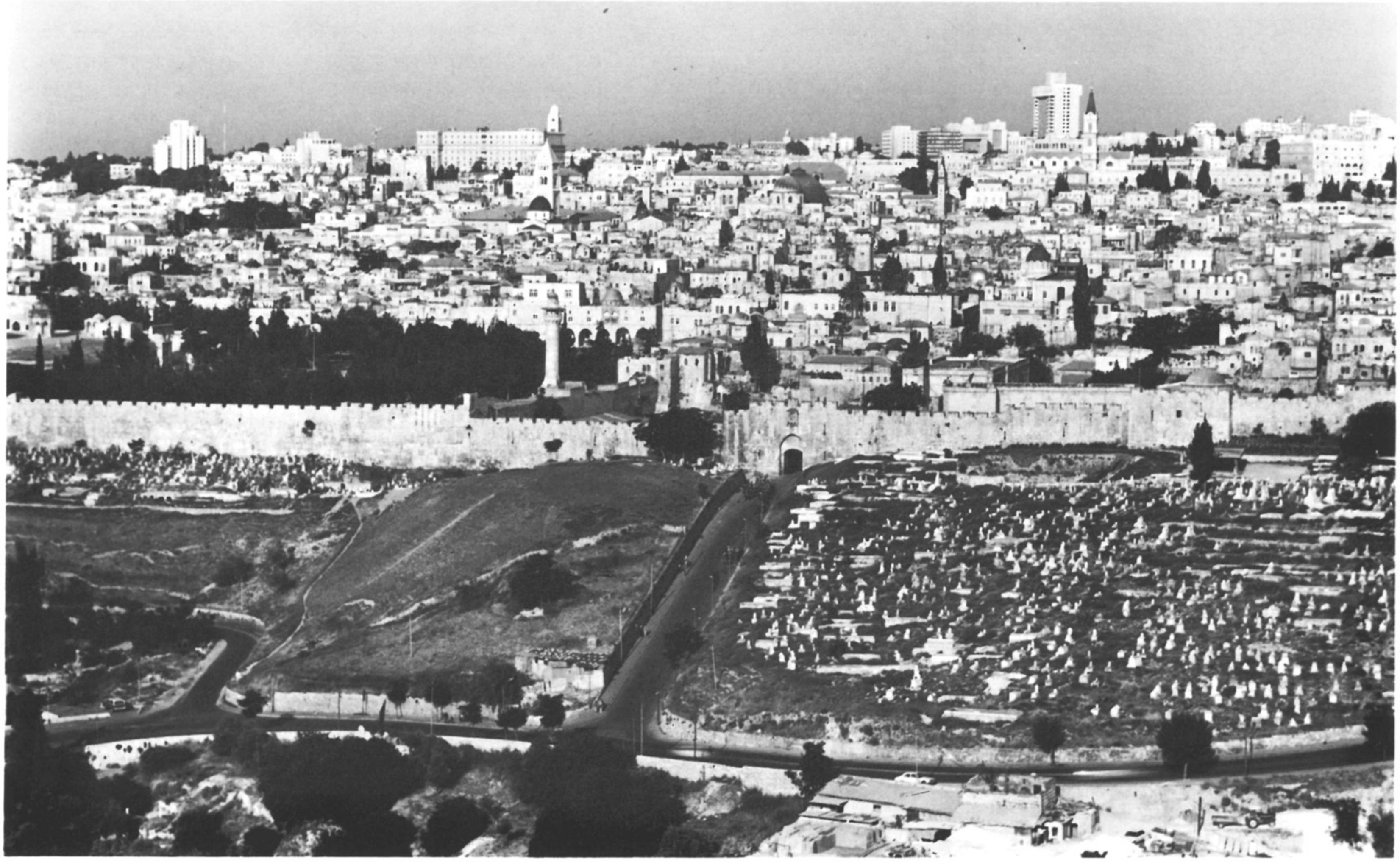


**2.71** *View from the east of St. Stephen's Gate area.*

2.71



Notwithstanding its significance, the situation at the gate now is an embarrassment. For centuries this area accommodated a large pool, a water collection point forming part of Jerusalem's rainwater storage system. This pool was known as Birket Israel, the pool of Israel, and it dated back to Herodian times. As recently as 1839 David Roberts made the now-famous etching showing pilgrims overlooking the pool. With little debate over the matter, the pool was filled in 1934 because its condition posed a threat to public health; thus the image and character of the place were drastically transformed. It did not take much time for alternative uses to develop for the filled-in pool. During the Jordanian period, a depot for the distribution of food by the United Nations refugee agency UNRWA was constructed on part of the site, and the rest was used for parking, trucking, and merchandise transfer activities.

The opportunities for the area are obvious. Reasonable and minimal measures could restore to the area its beauty and dignity. However, the problems in achieving this are equally obvious. It would be extremely difficult to reclaim the area once occupied by the pool of Israel for the purpose of landscaping and the restoration of the pool without finding adequate sites for the activities now there. Even if introducing these activities to the area was an error in judgment, comparable facilities and services must be provided. This applies not only to the UNRWA depot, for which an alternative location could be found, but also to the informal transportation facility that has come to exist in the area. The need for alternative parking and loading facilities cannot be ignored; an attempt to redesign the area without accommodating these activities is bound to bring about considerable tensions in the surrounding community. Thus the students approaching the design of the area were in a "Catch-22" situation: they all had exciting ideas about what might be done with the areas within the gate, but they had to come forward with plans for the existing activities.

There were certain elements common to all the proposals. Everyone felt that a major public open space should be created within the gate and that some elements evoking the memory of the historic pool should be introduced. All felt that the development could accommodate some new buildings and that these should be institutions serving the Muslim community surrounding the area.

Greater differences emerged in the proposals for accommodating the parking and transportation facilities presently inside the walls. These ranged from constructing an underground parking structure outside the wall next to the sheep markets, to developing a small parking structure immediately outside the gate built into the slope of the land descending into the Kidron, to integrating parking with housing and residential revitalization of the Muslim quarter within the northeast corner of the walled city where vacant land existed. Not a single team attempted to deal with the two problems in an integrated manner — for example, providing a sequence of open spaces within the gates under which parking would be accommodated. Whether that overlooked an opportunity for even more satisfactory solutions can be judged only by comparing the proposals.

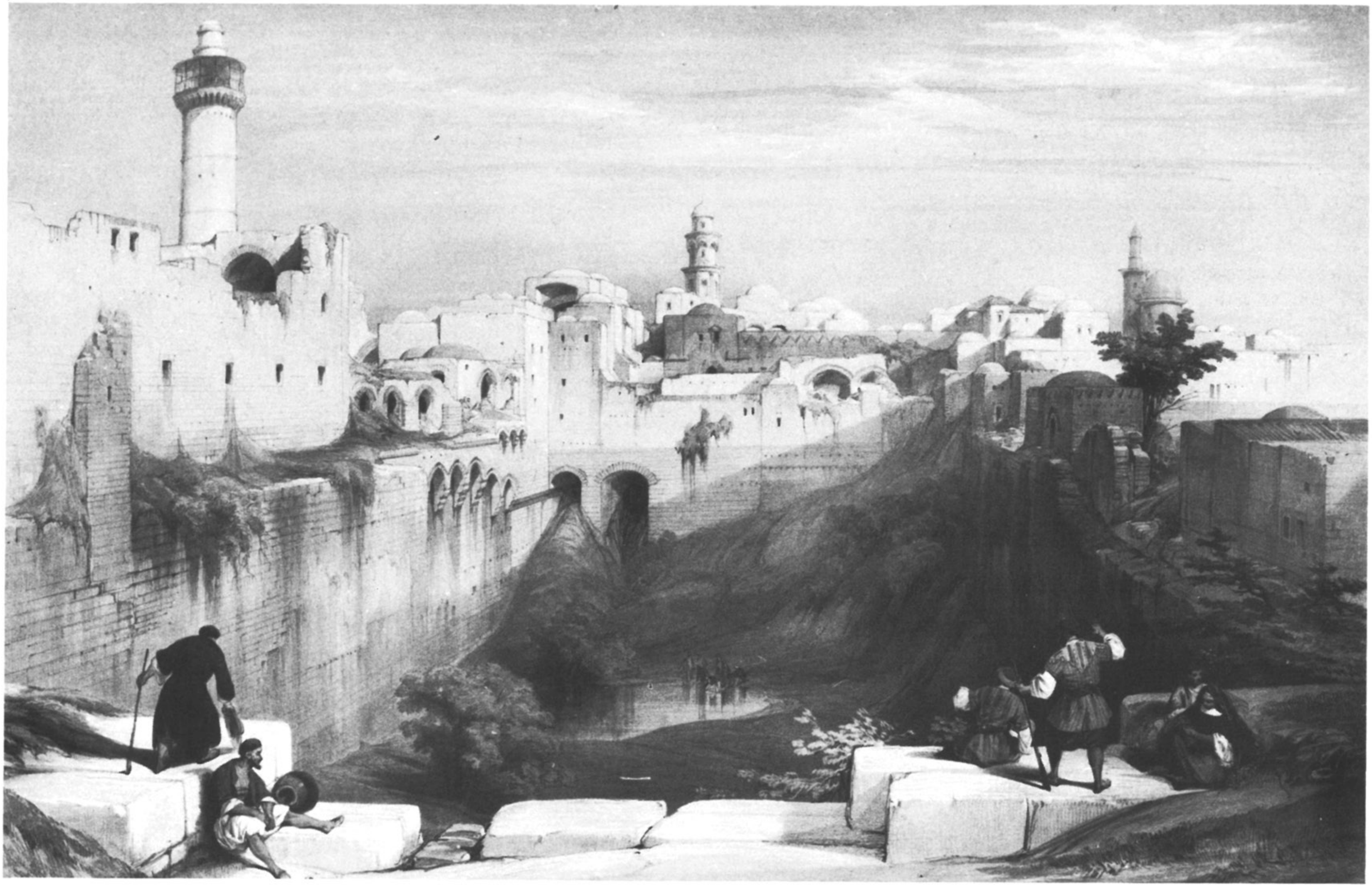
A team consisting of Judy Gross, Tom Maistros, and Clifton Page, working with faculty members Safdie, Krauss, and Lane, developed a design compelling in its simplicity. It essentially restored the entire pool of Israel as an open space. Half of that space divided along its longitudinal axis was to be a pool, the water abutting the wall of the Temple Mount; the other half was to be developed as a garden. The rectangular garden and pool, measuring nearly 60 by 345 feet, would be contained by an arcaded structure separating it from the Via Dolorosa. An open arcade would make the garden visible to those entering from St. Stephen's Gate; it would then become solid as it recreated the tight dimensions of a five-meter street leading toward the Stations of the Cross. The activities to be accommodated in the arcaded three-story structure would include small shops, community services, Muslim scholarly functions, plus a women's and a men's hostel to accommodate Muslim pilgrims coming to the Old City. The structure itself was to be traditional in appearance. Stone arcades would form a screen structure to the east defining the walkway that allowed Muslim pilgrims to turn left as soon as they entered the gate and passing the garden en route to enter the Haram el Sharif's northeastern quarter.

In contrast, the team of Fred Biehle, Guy Hagstette, and Hamdan Shamsuri, working with the same faculty members, proposed dividing this area into two parts. Two square public open spaces would be formed by a series of buildings in the shape of a T. The upper half of the T, in a manner similar to the previous scheme, would separate these squares from the Via Dolorosa, but the leg of the T would divide the space in two. The western square would accommodate an amphitheater, while the eastern square would form part of the entrance to the Temple Mount. The structures were to be used as facilities for the Muslim community — a community health center, a community kitchen, classrooms, and a library for Muslim scholars. The authors of the scheme viewed this as a highly active center for the surrounding community: it would become the place where people would meet and performances would be staged. Thus the space would have a ceremonial function at certain times of the year and be an active community place during the rest of the year. The buildings themselves would be equally outgoing and would include a massive arcade supporting two additional floors of activities. The rhythms of the arcade and the details of the facades would make the building seem at once part of the fabric yet clearly a contemporary addition.

A third team proposed that parking could be provided on the vacant land in the northeast part of the Old City by tunneling under the wall in a manner similar to that proposed for the parking facility for the Jewish quarter. This team combined its proposal for parking with new residential construction on top. Since this plan includes a considerable residential component, it will be reviewed as part of the discussion on the strategy for residential development in the Old City.

**2.72** *The area within St. Stephen's Gate was for centuries marked by a large pool — Birket Israel — which was part of a system of reservoirs and cisterns supplying Jerusalem with water. The area was a welcome site for pilgrims, as depicted in this lyrical 1839 lithograph by David Roberts.*

**2.72**



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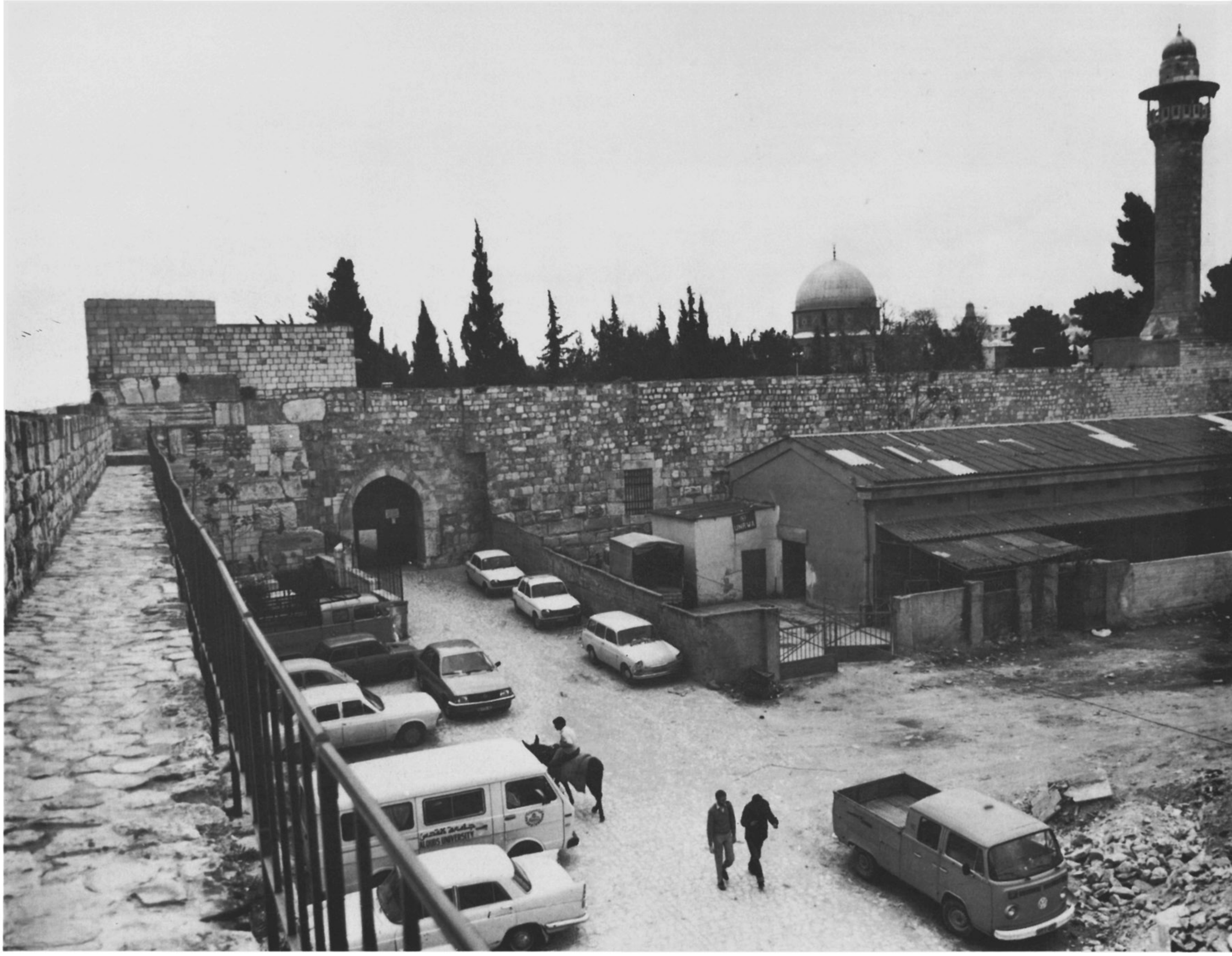
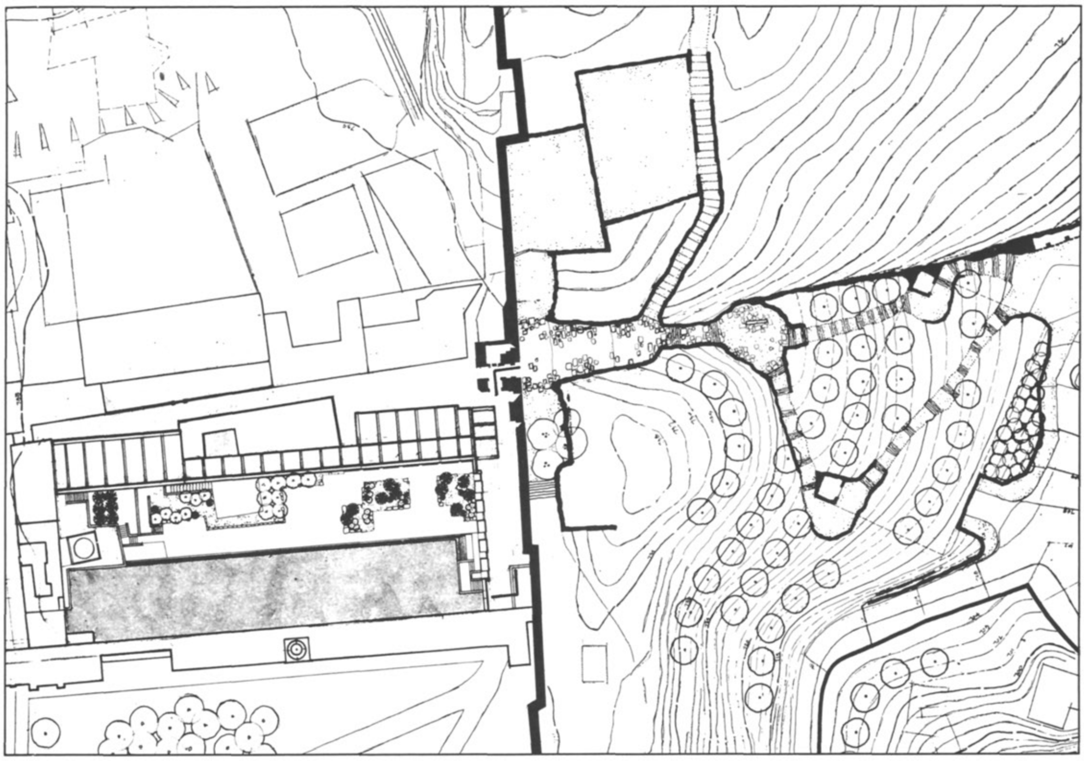


**2.73** *Panoramic view inside St. Stephen's Gate (the Pool of Israel). The contemporary condition of the area offers little solace to residents and visitors. Filled in 1934 because it was a health hazard, the site now holds an undistinguished parking area, a garbage collection site, a United Nations Relief Center, a few stone structures, and mounds of rubble. In 1983, the Jerusalem Foundation, through the services of the architect A. Rahamimoff, introduced improvements to the site.*

**2.74**



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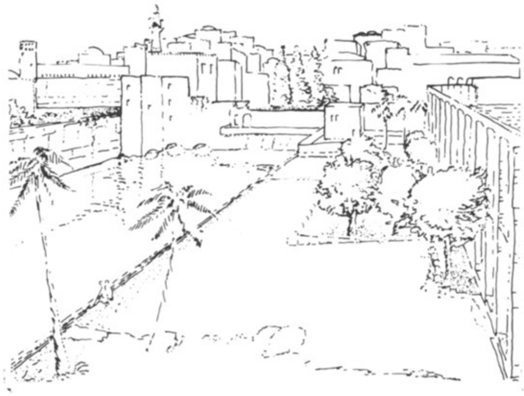

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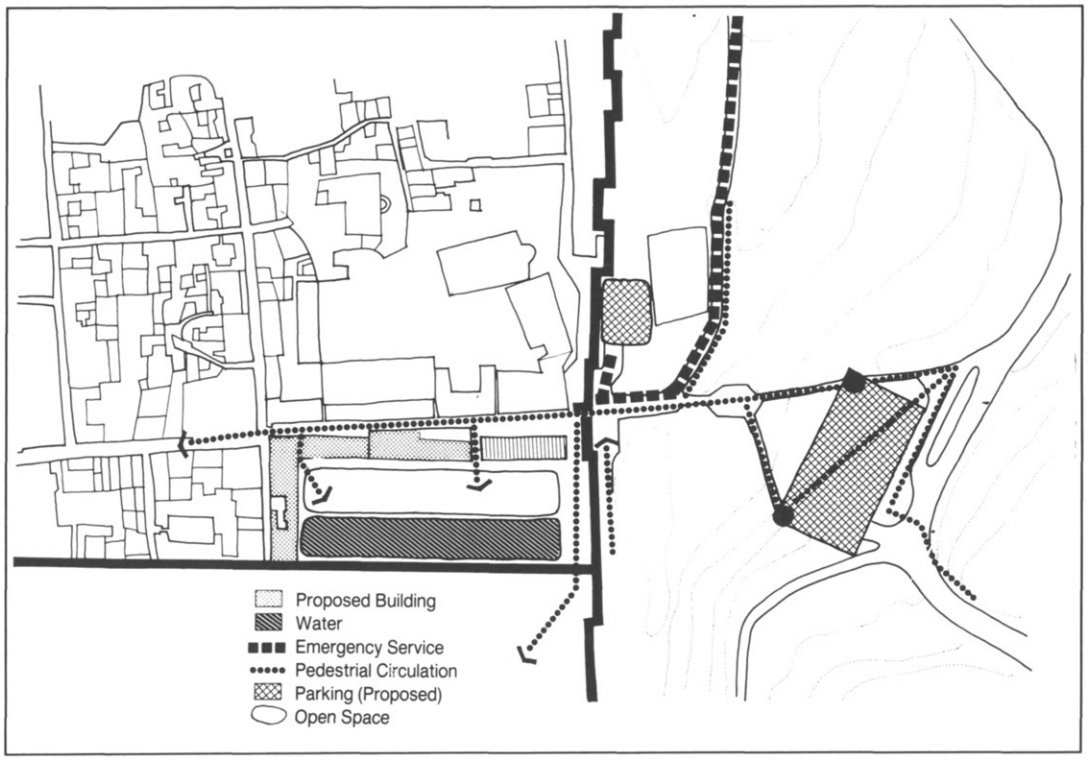


**2.74** *Site plan (Gross, Maistros, Page).*

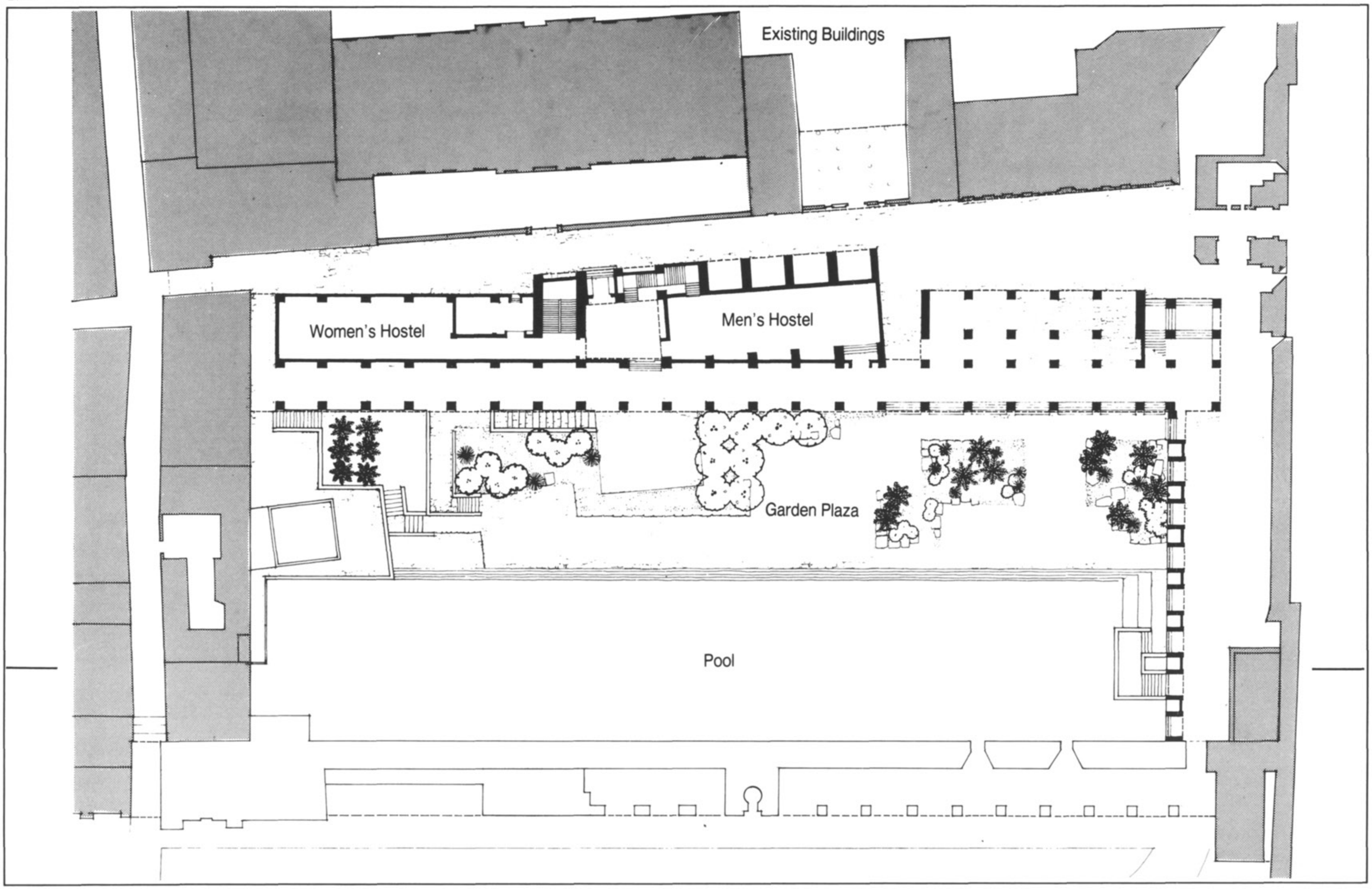
**2.75** *Proposed movement patterns (Gross, Maistros, Page).*

**2.76** *Perspective view of proposal (Gross, Maistros, Page).*

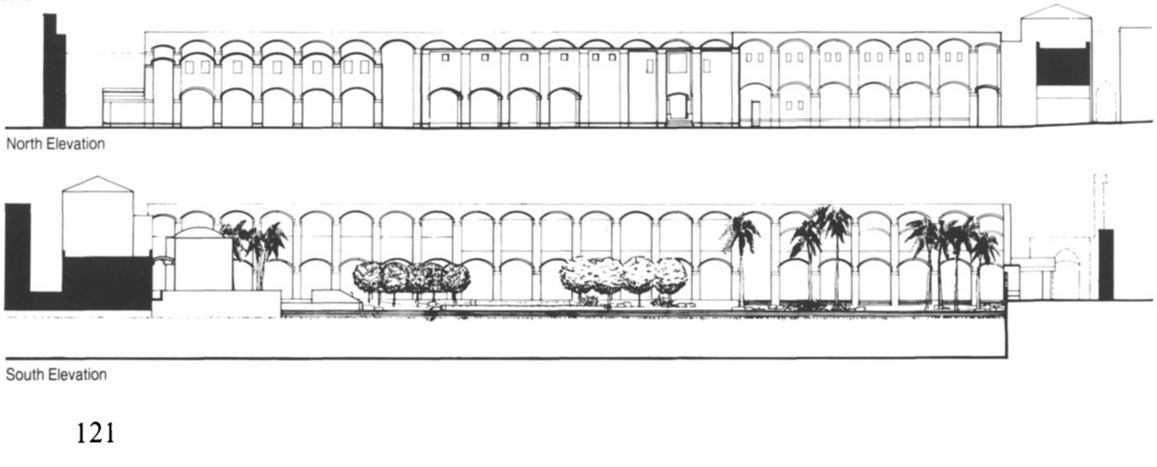
**2.77** *Proposal for the reconstruction of the pool area to include a simple expanse of garden bordering a new pool. Sheltering this area from daily activities on nearby streets is a two-story structure housing limited commerce, hospices, and community facilities (Gross, Maistros, Page).*

**2.78** *Elevation and section (Gross, Maistros, Page).*

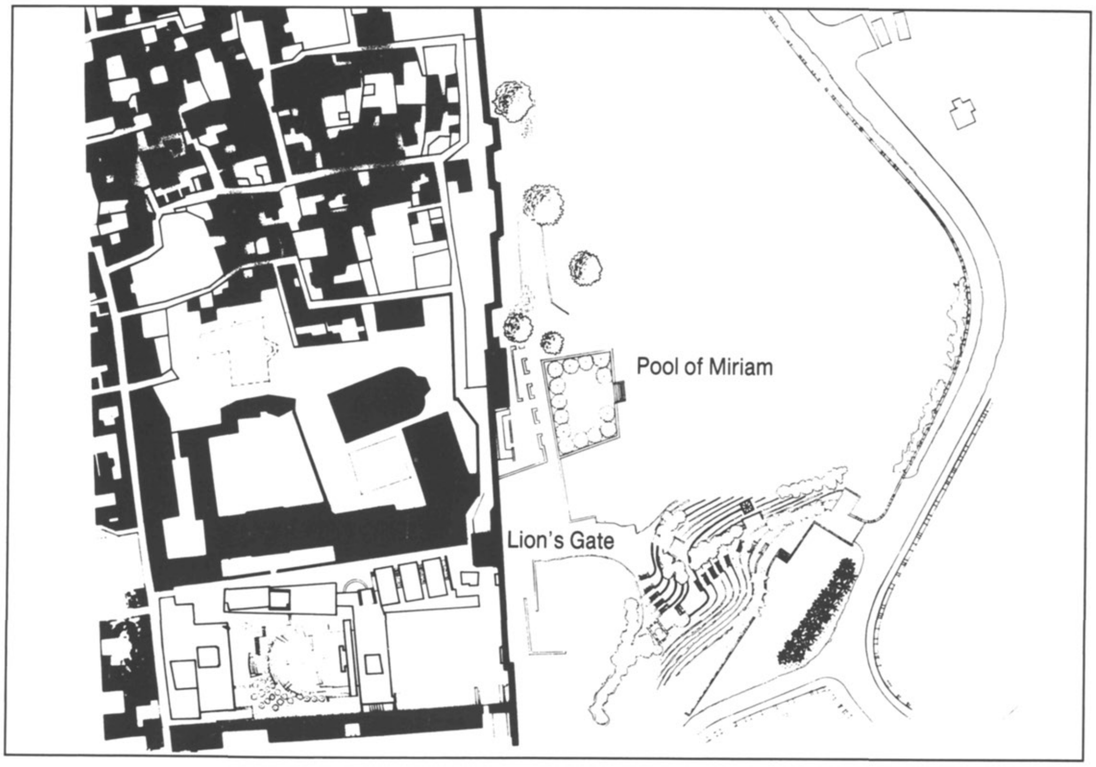
**2.77**


Existing Buildings
Women's Hostel
Men's Hostel
Garden Plaza
Pool

**2.78**


North Elevation
South Elevation

2.79



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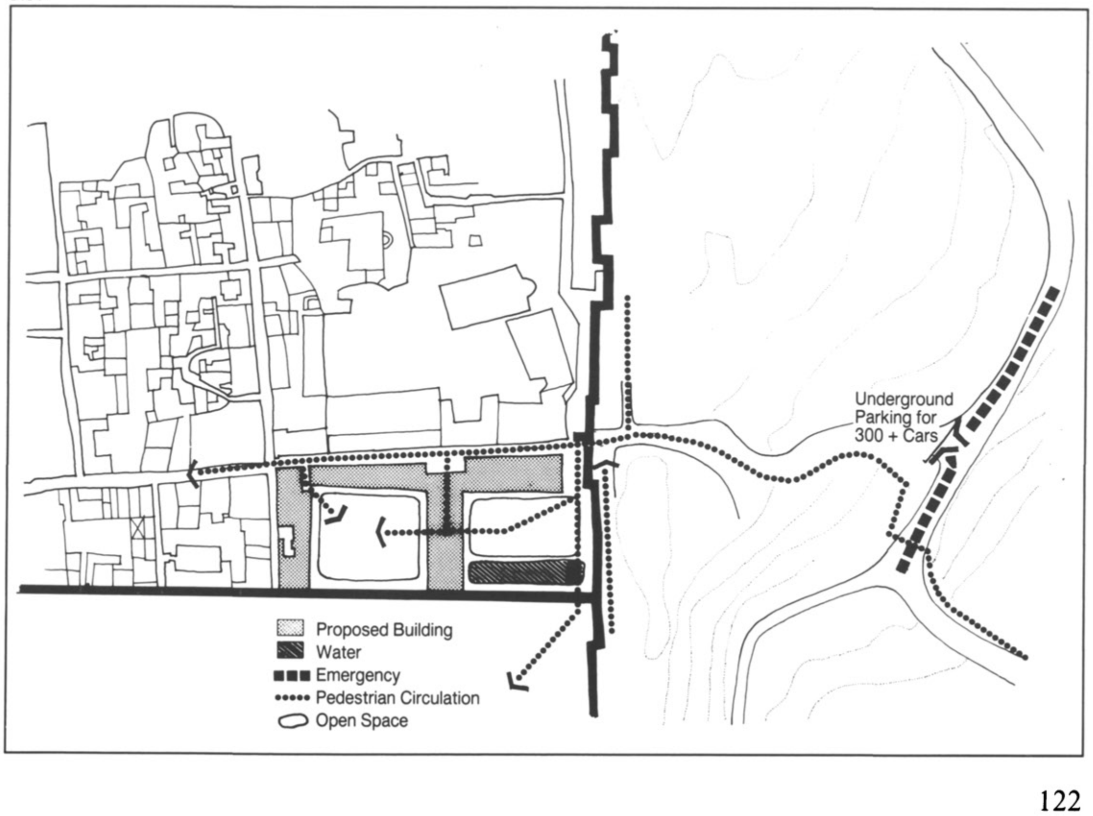
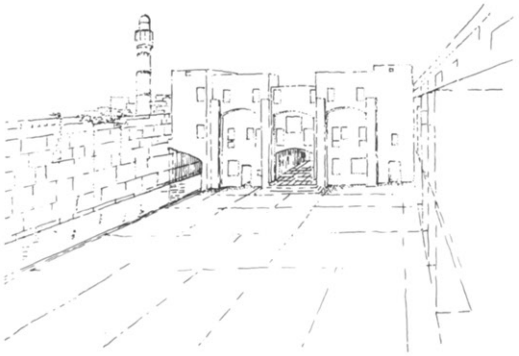

Underground Parking for 300 + Cars
▨ Proposed Building
▨ Water
■■■ Emergency
•••• Pedestrian Circulation
⬭ Open Space

2.81

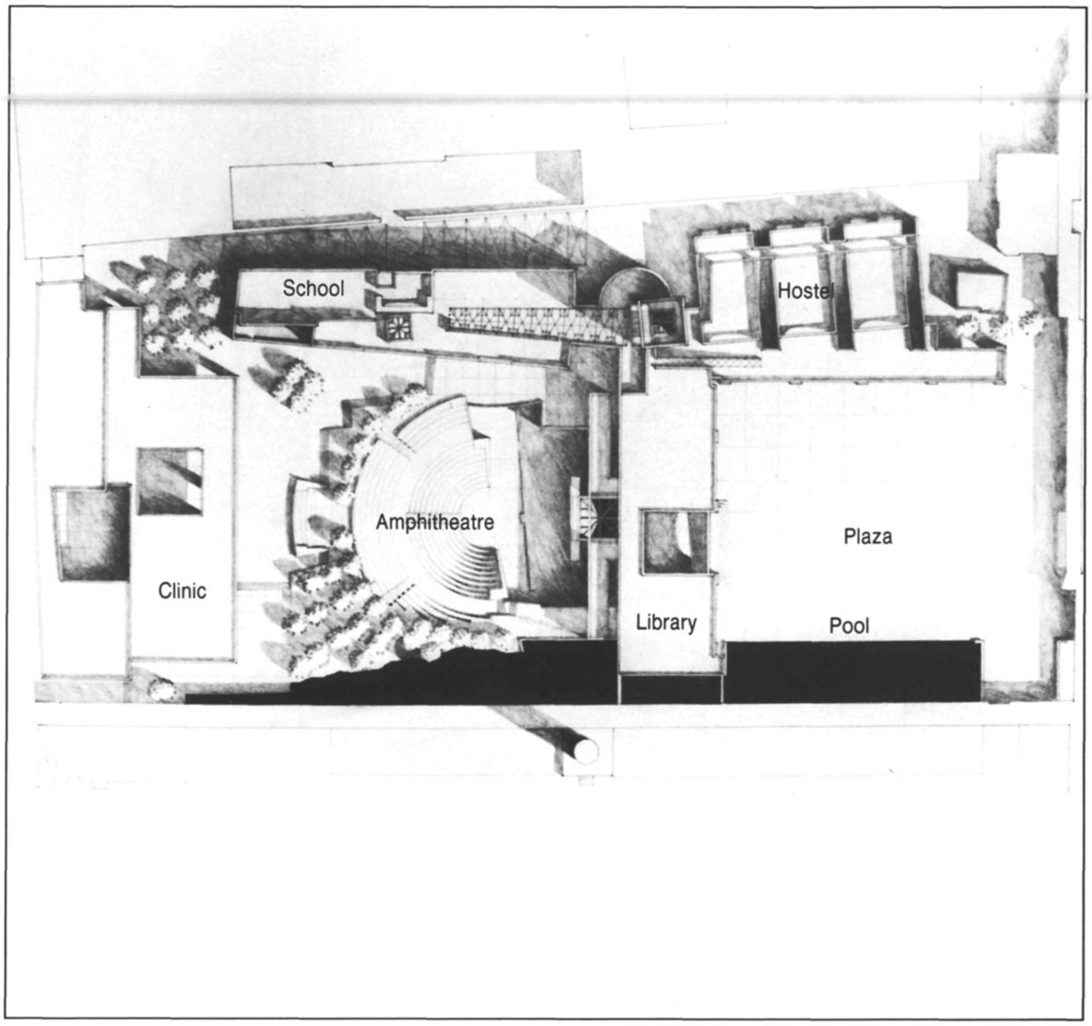


**2.79** *Site plan (see illustrations 2.69 and 2.70).*

**2.80** *Proposed movement pattern (Biehle, Hagstette, Shamsuri).*

**2.81** *Perspective view of proposal (Biehle, Hagstette, Shamsuri).*

2.82



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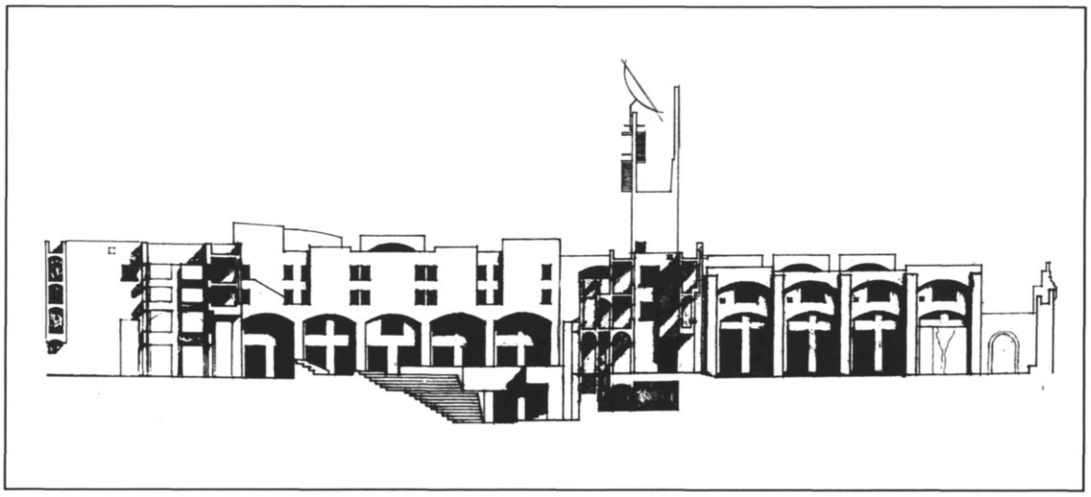
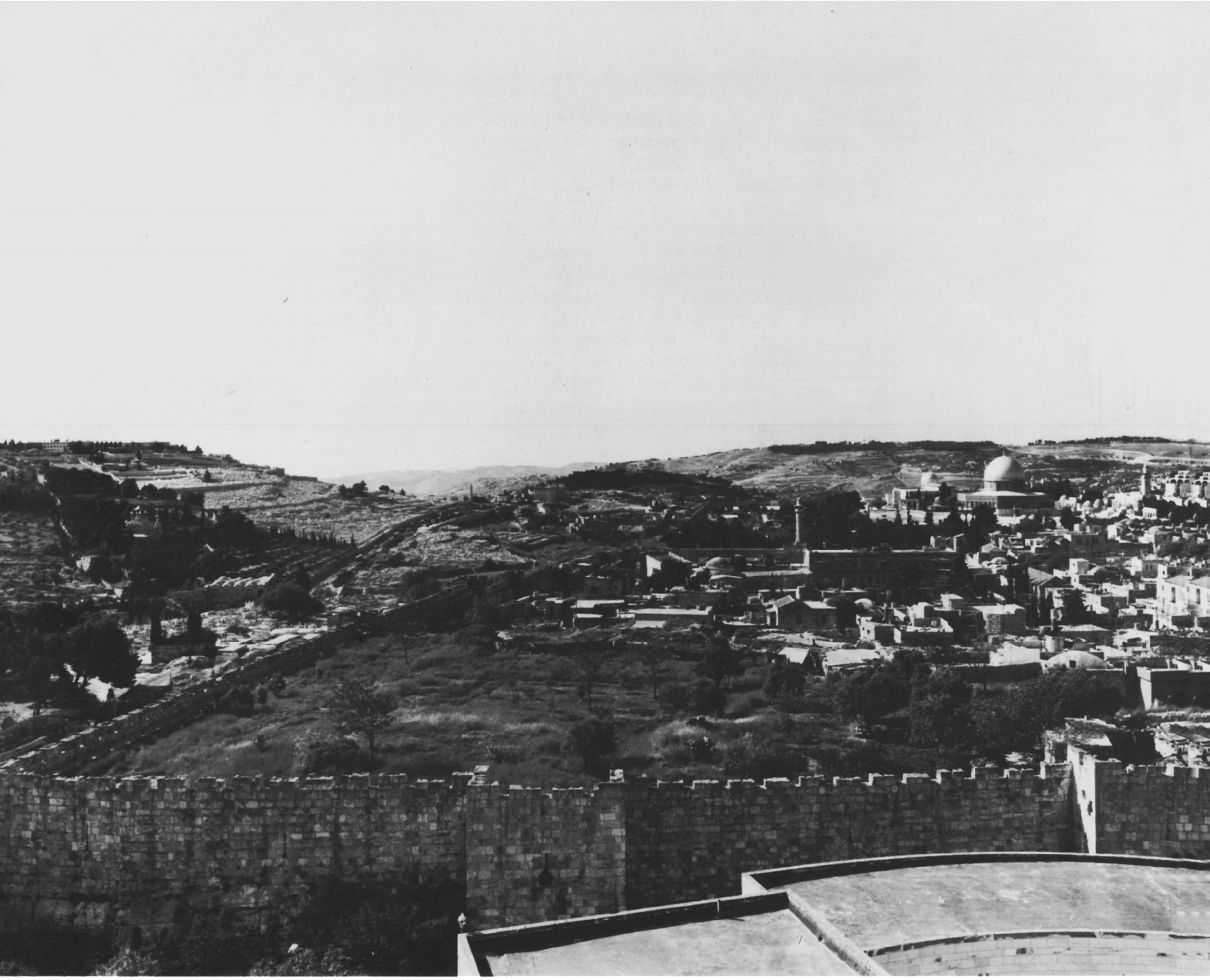


**2.82** *Proposal for the reconstruction of the pool area to divide the area in two with interconnected functions. Two public spaces are formed by a series of T-shaped buildings, which contain facilities and libraries for Islamic scholars (Biehle, Hagstette, Shamsuri).*

**2.83** *Elevation (Biehle, Hagstette, Shamsuri).*

2.84



**2.84** *An overview of the Bab-Hutta sector in the northeastern corner of the Muslim quarter, which contains some of the most dilapidated housing in the Old City. The expanse of open space disguises extensive problems of overcrowding, poor building conditions, and a lack of social institutions. Improving the physical and living conditions for the residents is stymied by unresolved political disagreements.*

**2.85** *Roofscape in Bab-Hutta.*

## IMPROVEMENT OF RESIDENTIAL QUARTERS: THE MUSLIM QUARTER

All students visiting the Old City were struck by the poverty and dilapidation present in the Muslim quarter. Important historic monuments, the Mameluke-period *madrassas*, had been converted into hovels by residents. Makeshift buildings stood in open courtyards; the masonry buildings were in bad condition and were occupied in extremely high densities. Stephanie Mills, working with Nader Ardalan, documented from municipal records some of the benchmarks of poverty that prevailed in the Bab Hutta sector.

The total population of the quarter is currently estimated to be around 5,500 persons, living in approximately 850 dwelling units with an average density of 9 units or 54 persons per dunam (1,000 m$^2$). The average household size is 5.96 persons, but it varies from 1 to 11 persons; the predominant type is in the extended-family tradition. The average number of rooms per household is 2.1, and an average of 2.95 persons occupies one room. Infant mortality is high; about 17 percent of all children born in the area die in infancy. Fifty percent of the population are under age fourteen. Approximately 30 percent of the population have no education, while another 30 percent have only elementary educations. The average annual salary per household is $83 in current U.S. dollars. A large percentage of the community receives economic aid from UNRWA. In 1972, the last year for which census information is available, only 6 percent of the households had ownership of or access to a car.

The students became aware that spurring official action to improve conditions was complex and difficult. In discussions with Israeli municipal officials, they were told that the city was doing its utmost to change conditions in those domains in which the municipality can effectively act. For example, the city was introducing water, electricity, and sewer systems to all the residents. Welfare programs were also introduced. On the other hand, municipal officials were quick to point out that the wealthy Muslim families were fleeing the Old City for the suburbs of Jerusalem and that, furthermore, the Waqf, the holy Muslim council that owns much of the property of the Muslim quarter, had been totally uncooperative in collaborating with the municipal authorities on any program of rehabilitation. Meetings of students and faculty with the representatives of the Waqf and the Muslim community exposed the other side of the story. As far as the Waqf was concerned, it did not recognize the Israeli administration and would not collaborate with it. Even unilateral action by the Waqf using its own funds from other Arab countries to improve the physical and domestic conditions in the Old City was considered tantamount to collaboration. In other words, the poor conditions must prevail as a symbol of refusal to accept the status quo. The status quo of the physical condition became a protest against the political status quo. In the meantime, hundreds of families suffered in unacceptable conditions.

Perhaps because the students and faculty sensed the frustration and impotence of all those concerned with doing anything about the Muslim quarter, it became the subject of intensive study. As designers, the students were interested in how they might improve living conditions. But, once versed in the complexity of providing housing, social services, and rehabilitation programs, they also ventured into how such programs might be implemented and administered. Two proposals were developed in some detail; they demonstrated different approaches to the problem and different assessments of the potential of the community.

The proposal by Y. Y. Lin, Michael Smiley, and Peter Tagiuri, working with Safdie, Krauss, and Lane, combined residential construction with parking relocated from St. Stephen's Gate. The team observed that there was considerable crowding in the Muslim quarter, but that any attempt to reduce the occupation density in the housing, which would

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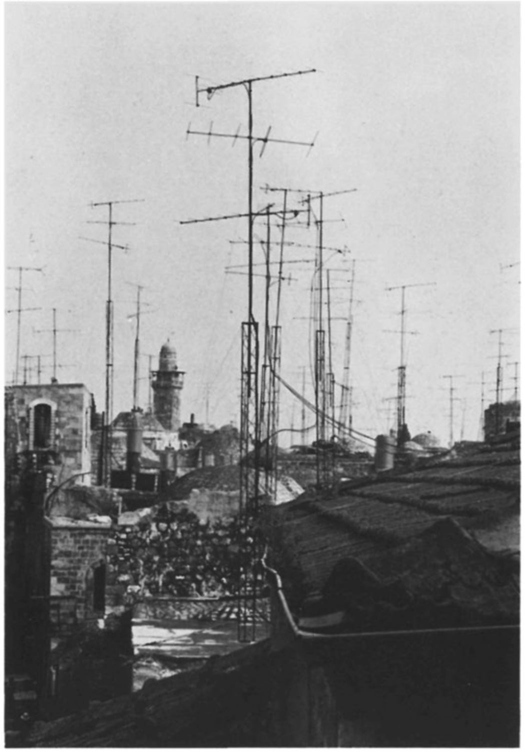

necessitate families moving out of the Old City, would be interpreted as a scheme by the Israeli authorities to deport Arabs from the Old City. Hence, the team concluded that a dedensification process could only be brought about if additional housing could be constructed inside the city walls. Having identified the vacant land at the northeast corner, they then moved forward to solve two problems at once: relocating the parking of Lion's Gate to that corner, while on the same location constructing 225 new dwellings.

In proposing this strategy the team was making a number of controversial assumptions, which became the subject of intense discussion. The first assumption was that access, ease of parking, and servicing in the Muslim quarter should be comparable to those provided for the Jewish quarter and other neighborhoods outside the city walls. The failure to provide these amenities, the team argued, would drive those who reached a certain level of affluence to leave the Old City as they have done in the past few decades. Thus the Old City would continue to accommodate the poor only.

The team was taking its cue from the patterns evolving in the Jewish quarter. There, because of the reconstruction resulting from the destruction in 1948, gentrification was taking place as the Jewish quarter was repopulated almost from scratch. During the process of repopulation, the Corporation for the Reconstruction of the Jewish Quarter had concluded that parking facilities must be provided for the residents at the southern edge of the quarter, from which a network of alleys and paths would lead to the residences. At the time of the studies, the Jewish quarter terminal was being designed by Lawrence Halprin. But the failure to construct it on schedule was already creating considerable agitation within that particular neighborhood.

Thus the strategy of this team was to bring about a certain amount of gentrification by providing housing and facilities of a level considerably higher than anything heretofore provided in the Muslim quarter. The team argued that new housing should provide opportunities for families then residing either in or outside of the Old City. Having adopted this strategy, their next point was to demonstrate the possibility of accommodating both housing and parking on the same parcel of land; they needed to resolve the access problems from the roads surrounding the Old City by finding a route for vehicles to enter the parking garage. An ingenious scheme demonstrated that access to the parking garage could be provided without tampering with the walls themselves by ramping under them and excavating into bedrock. Furthermore, the design showed that the two-level garage need not become a dark and dingy underground place. A structure perforated with large openings would allow light to penetrate the parking levels and make the experience of arrival a pleasant one. The team was particularly concerned with the problem of matching the regular structural bays for the garage with the housing. They justifiably feared that in having the housing accommodate the regular grids of a parking garage, the resulting fabric of buildings would be alien to that of the Old City. One possible solution was to make the grids of columns necessary for the efficient parking of cars into the support for the housing fabric above, which would be more complex and adaptive in nature and the massing of which could be compatible with the traditional vernacular buildings of the Old City. Cantilevering and other means would make the design possible.

Supporters of these proposals argued that the design successfully provided more housing, leading to dedensification of existing structures while keeping the population of the Muslim quarter constant, and that it would provide a level of amenities that in time would lead to a desirable gentrification of the Muslim quarter. Critics of the scheme opposed it on the grounds that gentrification was not desirable. They asserted that structured parking with housing above required sophisticated building technology and considerable resources. Such funds, they

2.86

2.86 *Typical street view in Bab-Hutta.*

argued, were not available, and even if they were to become available, the proposal would bring about a change in population that was undesirable. Furthermore, they argued, residents of the Muslim quarter would in time cease to enter the Old City at its traditional entry points but would drive instead through some underground passage and emerge from an underground park into a network of paths not now part of the movement system of the Old City. (A similar criticism can be made of the car park proposed for the Jewish quarter.)

A very different approach to the same problem was taken by Stephanie Mills, working with Nader Ardalan. The basic strategy of Mills's proposal was to use the same land for low-technology, self-built, self-help construction that could, within their earning power, accommodate families now living in the Muslim quarter. In this plan, a number of assumptions were made. One was that no parking whatsoever would be provided in this area. If, in the future, parking were to be provided for the residents of the quarter, it would be done outside the wall and perhaps around the Sheep Market or even beyond, but within a five-minute walk of the gates. In order to develop a process by which residents could gradually build their own houses, Mills proposed subdividing the land into individual plots; each family group could thus freely build on its own plot at its own pace, unencumbered by its neighbors. Mills was drawing on her observations of the surrounding villages. Considerable construction was taking place in those villages, but it was going on in a piecemeal fashion, mostly a room at a time, with the residents providing much of the construction labor, supplemented sometimes by relatives and friends. Mills was proposing a similar process for providing housing within the Old City. Such a procedure could only take place if the density were restricted, with one family per plot, and if stacking residences one on top of the other were avoided. Mills established 75 to 120 square meters as the typical family plot, which resulted in 108 residential units as compared with Smiley's scheme of 225 units.

Mills developed guidelines for individual families to follow in constructing the units. The individual parcels were to be built upon with a structure in the shape of an L, so that the courtyard would face south in the general direction of Mecca. A core of utilities would be located at the bend of the L. This structure would be provided at the outset, and additional rooms could then be constructed as the family's means permitted. Construction would be of stone as required by law, but limited to two stories. Mills asserted that this could easily be done by self-help, as has been demonstrated elsewhere in Jerusalem.

The two proposals brought into lively discussion some of the unanswered questions regarding the preferred policies and the most effective strategy for improving conditions in the Old City. Foremost is the question as to who would actually do the building. The municipal authorities have expressed concern over the poor conditions, but they have been reluctant to take action they would normally initiate elsewhere in Jerusalem — that is, expropriating land and infusing public funds for rehabilitation of buildings by subsidizing the poor families. The reason for this reluctance is that Israeli authorities rightly believe that such actions would be interpreted as a takeover attempt of the Muslim quarter and would create agitation. They have thus reluctantly, and with concern, abstained from intervention other than to provide municipal infrastructure services. The Waqf, on the other hand, has also been reluctant to move. But the authorities have made clear, in the course of carrying out these studies, that they would support and encourage any unilateral action by the Waqf, by any other community development corporation owned by the Muslim community, or by a combination thereof in bringing about the rehabilitation of this quarter. It appears that the discussions surrounding the Harvard studios and the proposals developed by the students have in themselves generated an atmosphere of some cooperative effort which may eventually bring about tangible results.

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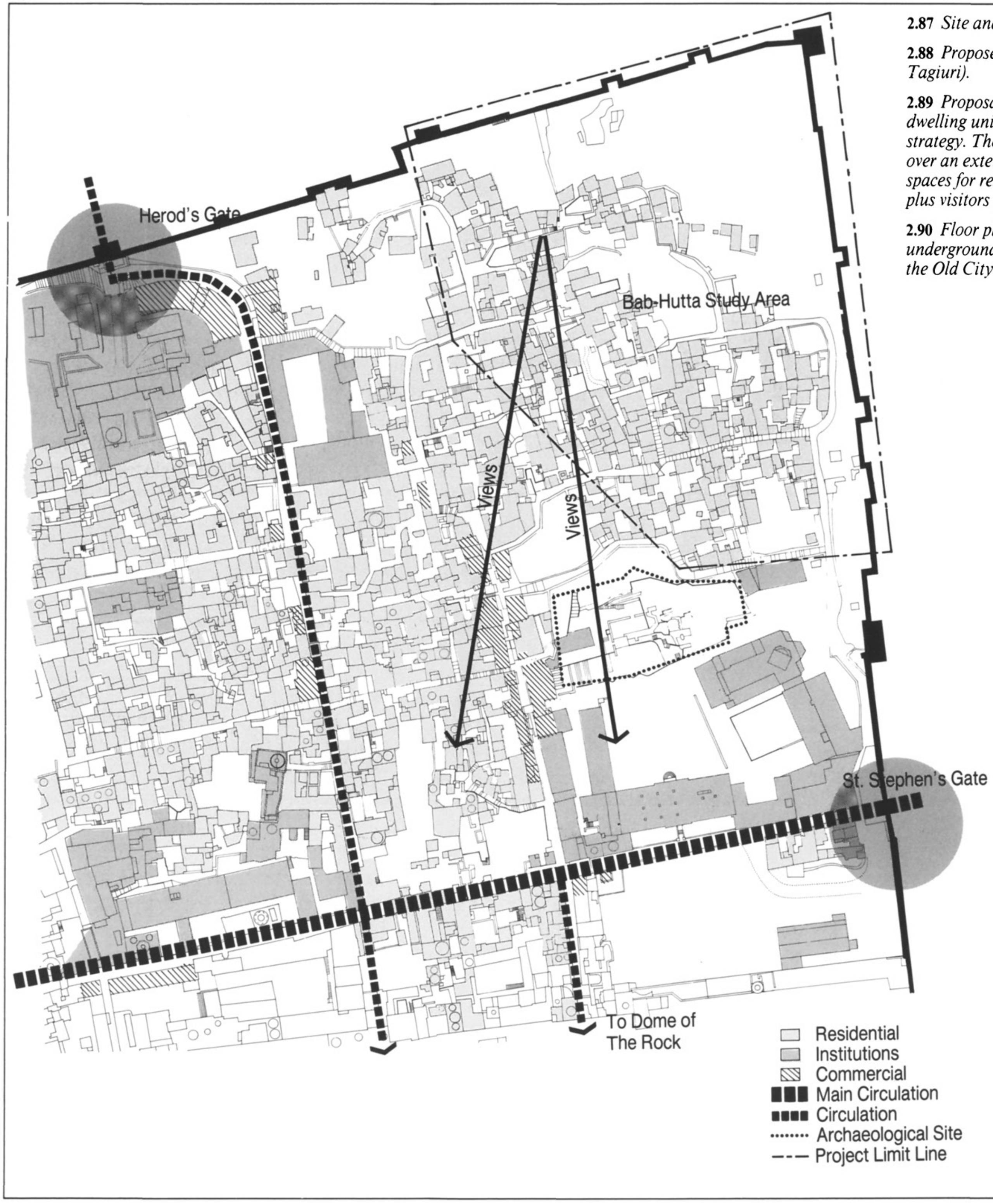

**2.87** *Site analysis diagram.*

**2.88** *Proposed movement patterns (Lin, Smiley, Tagiuri).*

**2.89** *Proposal for the construction of 226 dwelling units as part of an overall rehabilitation strategy. The housing units would be constructed over an extensive parking garage containing 650 spaces for residents of the entire Muslim quarter plus visitors (Lin, Smiley, Tagiuri).*

**2.90** *Floor plan of garage showing a new underground entrance to Suleiman Road under the Old City walls (Lin, Smiley, Tagiuri).*

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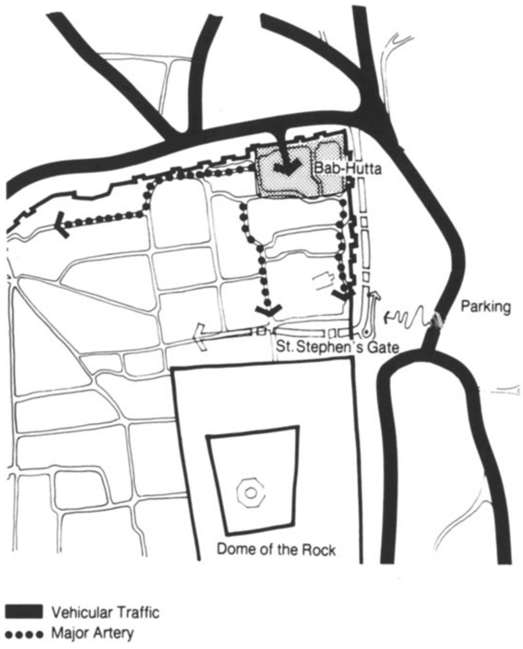

There is, however, continuing controversy and no resolution over the strategies that should be used to bring about the rehabilitation. The mayor argues that gentrification of the Muslim quarter is a desirable objective. He hopes that the influential and wealthy Arab families who have for years been fleeing the Old City will return. From the mayor's point of view, gentrification would mean the infusion of money, the strengthening of the community, and improvement of living conditions by virtue of the expectations and resources of the new residents. He sees no virtue in the fact that all the poor Arab families are concentrated in a single location in Jerusalem; it would be better to have pockets of poverty spread through various neighborhoods in the city.

Skeptics argued that the rehabilitation of the Muslim quarter would involve considerable funds. Underground parking could be provided in the Jewish quarter only with massive public subsidies. Where would these subsidies come from in the case of the Muslim quarter? The answer is that the neighboring Arab countries have the means and the desire to strengthen the Arab community in Jerusalem and that a development corporation with suitable funds should be created whose objectives would be to carry out this work. The counterargument is that all this will take time, and a minimalist scheme requiring the least capital expenditure would bring the fastest improvement in the everyday life of the residents. In accordance with this philosophy, Mills's project promises to deliver more housing in a manner compatible with the way it is now constructed. It requires the least outside support and, hence, intervention, and therefore has a greater chance for realization.

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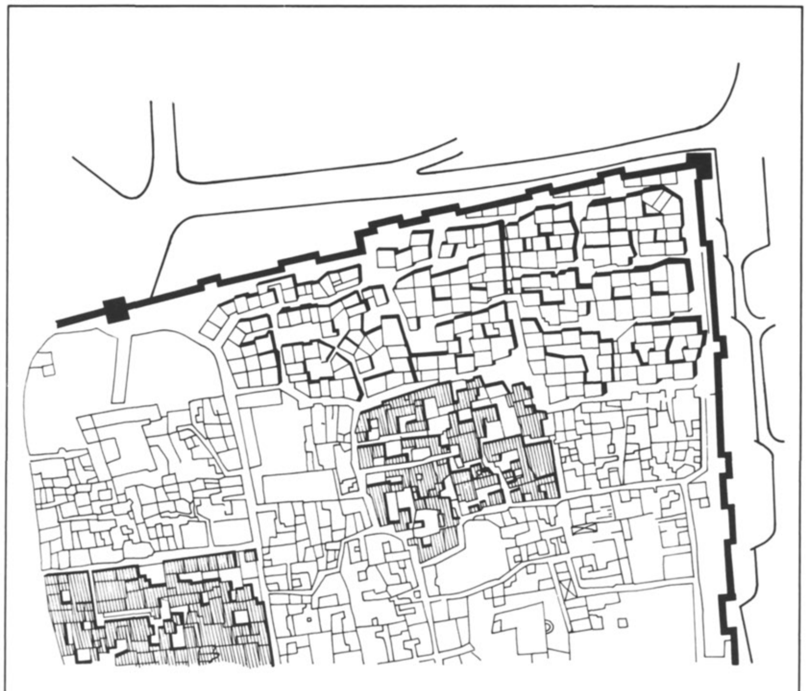

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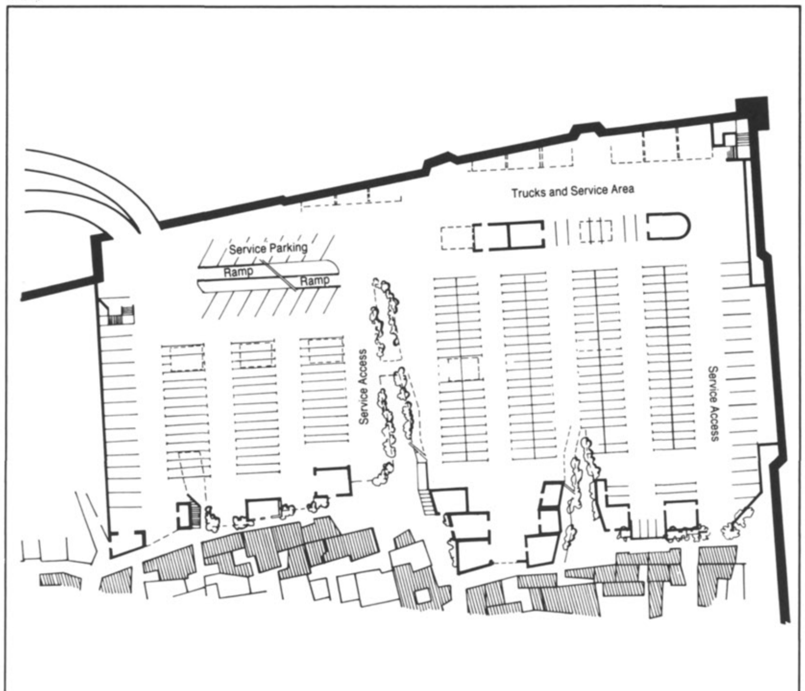

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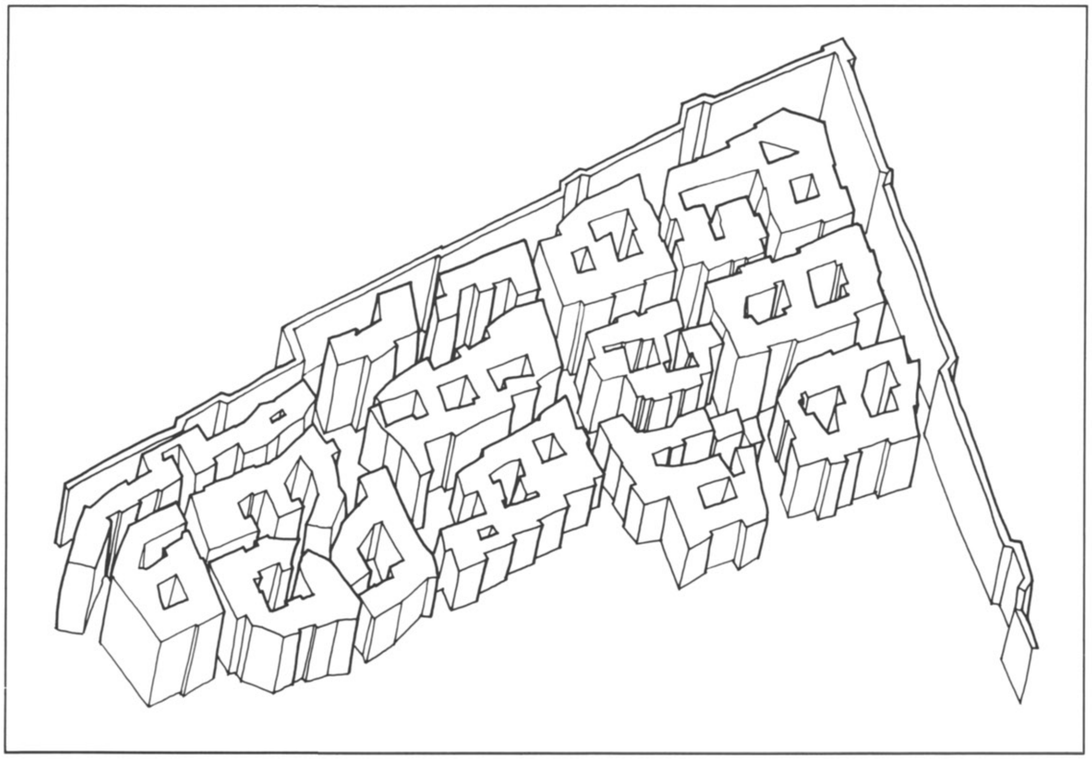

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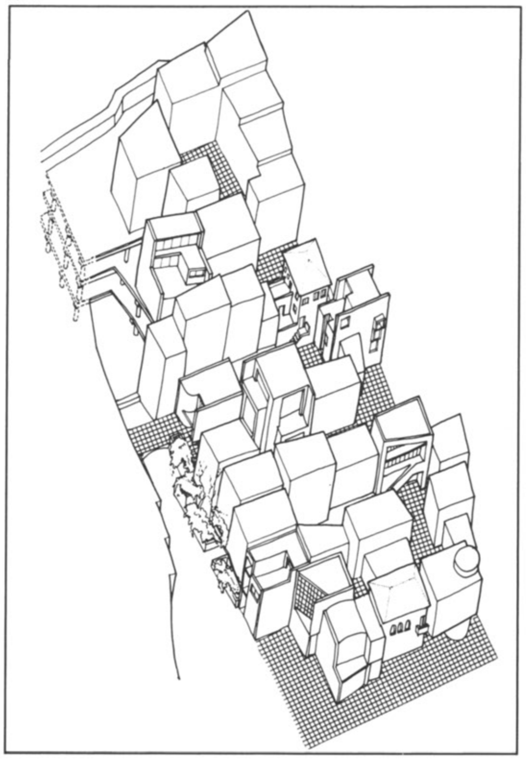

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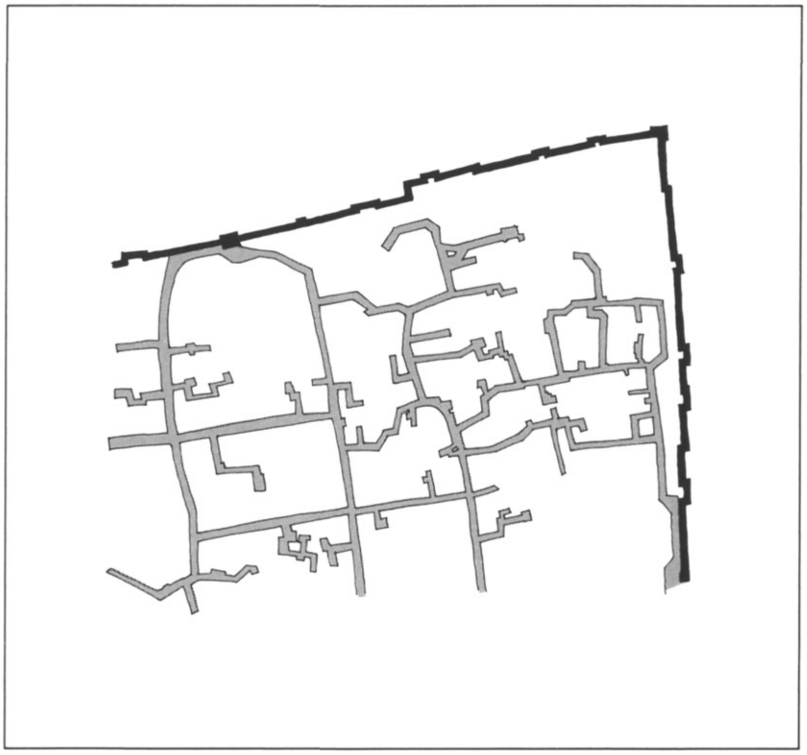

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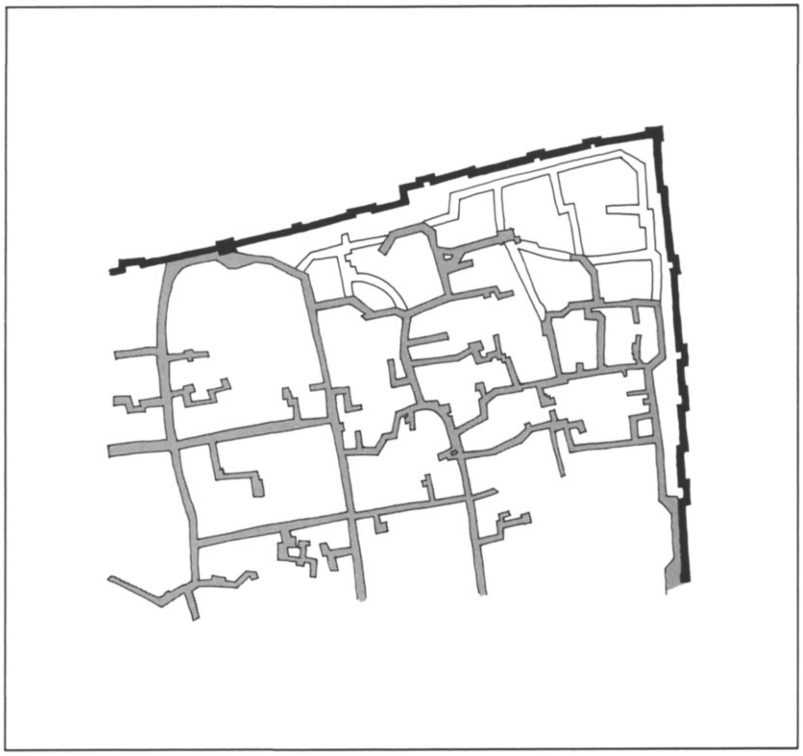

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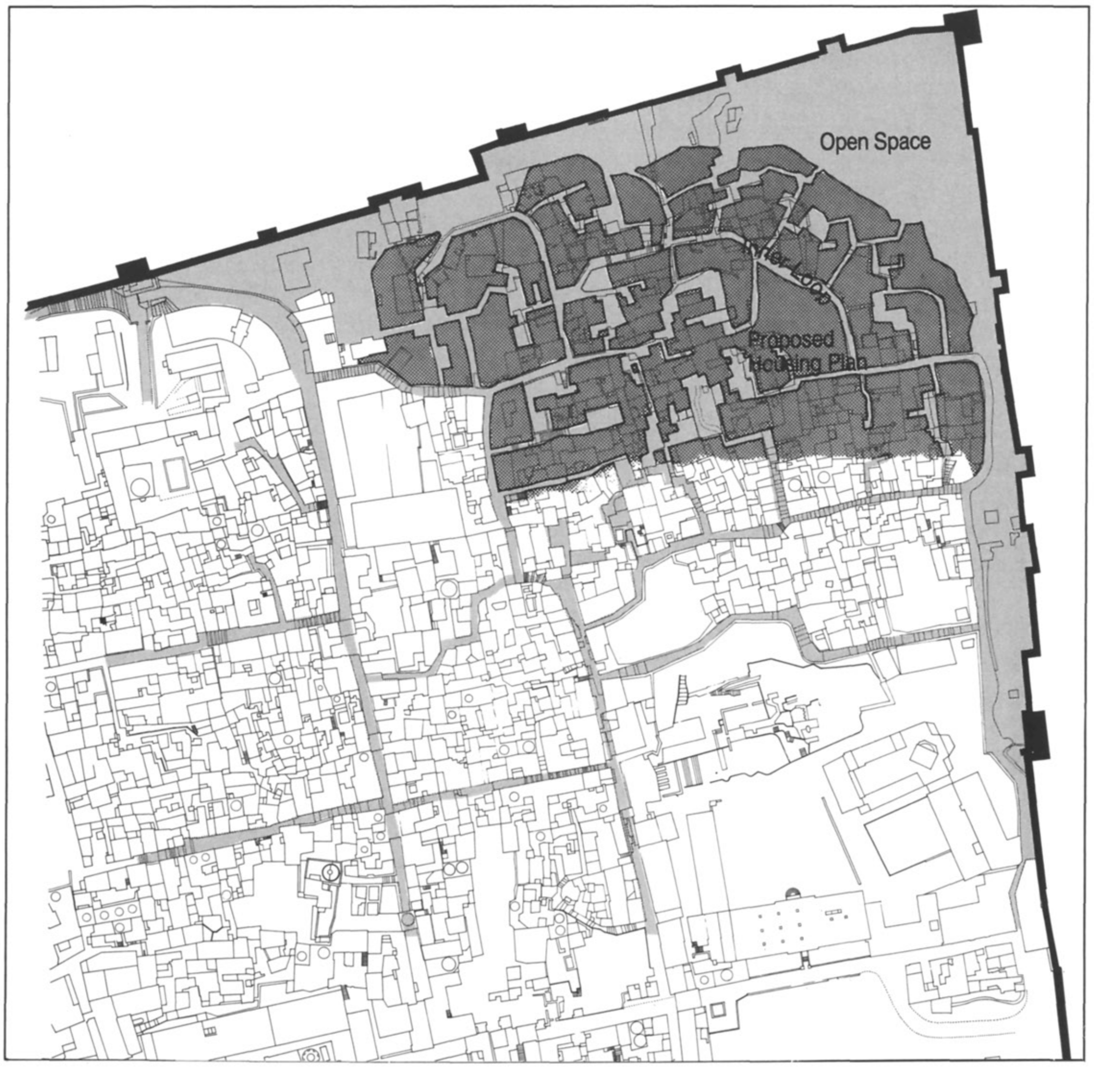

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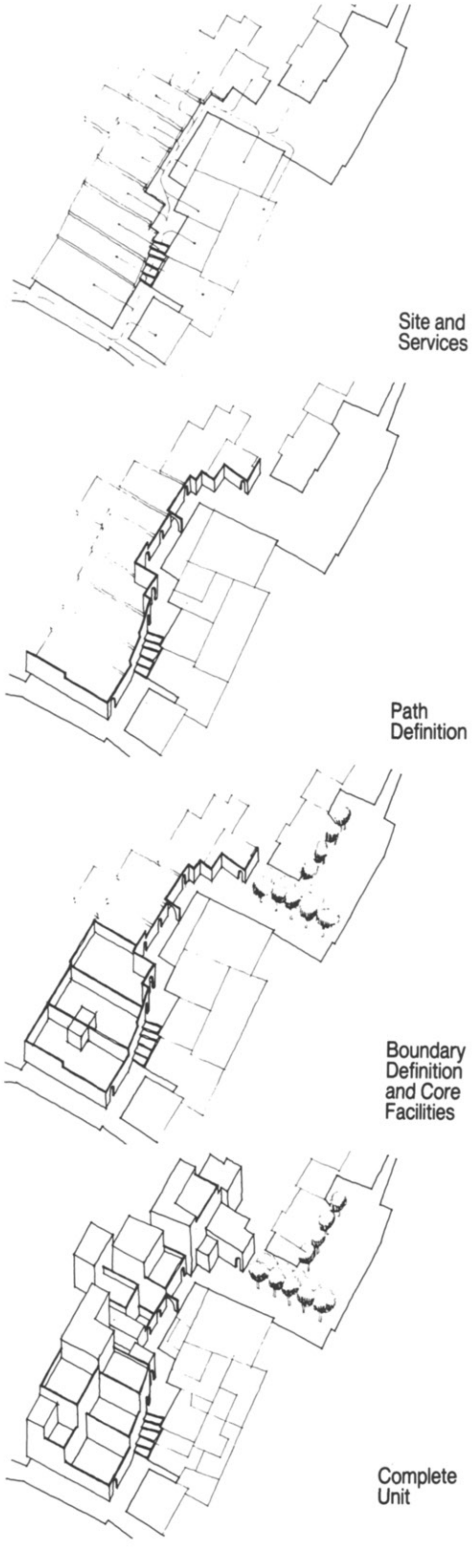

**2.91** *Axonometric view of housing clusters (Lin, Smiley, Tagiuri).*

**2.92** *Existing street patterns.*

**2.93** *Proposed extension of the present street patterns.*

**2.94** *A typical housing cluster (Lin, Smiley, Tagiuri).*

**2.95** *Proposal for the rehabilitation of Bab-Hutta to include the cluster development of new housing which present residents could afford. The proposal includes the eventual construction of 108 dwelling units in a fashion based on housing types evident in nearby villages (Mills).*

**2.96** *Alternative implementation strategies included parcelization and the provision of minimal services; parcelization, services, and construction of walls to define the pathways; parcelization, services, path definition, and the provision of core facilities; and development of the entire parcel and unit (Mills).*

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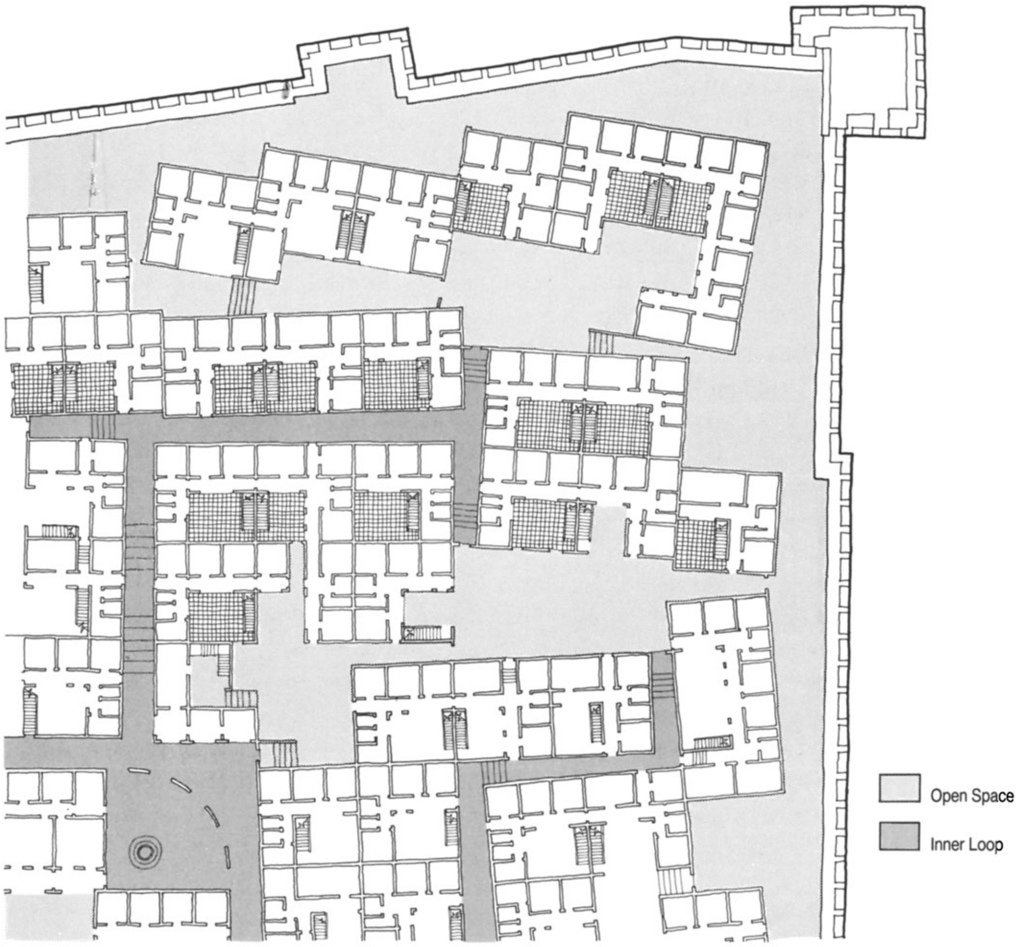

**2.97** *Proposed housing cluster arranged around an inner-loop system. Units contain individual garden spaces and are arranged to maintain familial privacy (Mills).*

**2.98** *Axonometric view of the cluster unit (Mills).*

**2.99** *Section across the project (Mills).*

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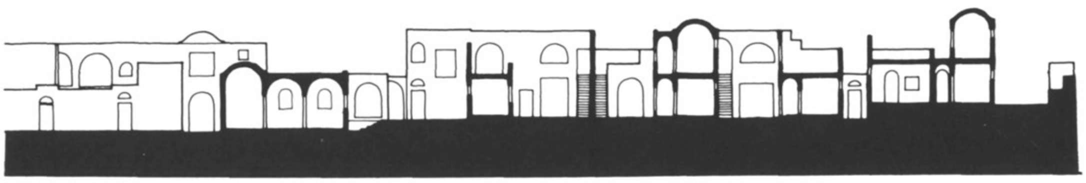

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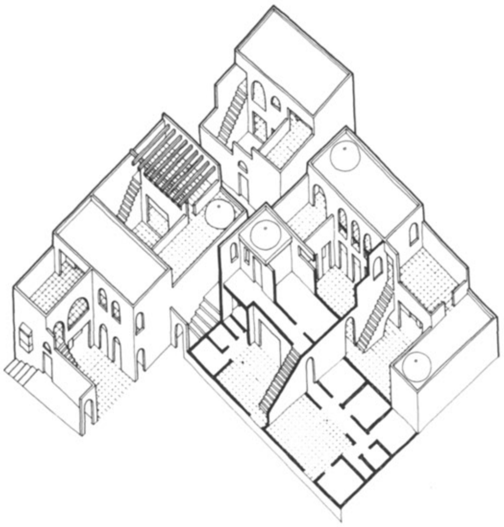

**2.100** *During the reconstruction of the Jewish quarter, the remains of the original Roman street, the Cardo Maximus, were discovered. It has since been integrated into the new shopping street.*

Deterioration in the Muslim quarter is not limited to the residential fabric but also involves many of the historical monuments, which are in a serious state of disrepair. It is the sad case in Jerusalem that often deterioration is a result of political disputes rather than of a shortage of funds. For example, although most of the historic buildings of the Christian community, including the Armenian quarter, have stayed in a reasonable state of repair, the Holy Sepulchre itself had seriously deteriorated as a result of disputes of ownership and juridisction over various parts of the church by the many Christian denominations that make claims upon it. The government of the British mandate attempted for many years to resolve these conflicts and bring about agreements that would enable the various denominations to come together and initiate the rehabilitation of the church. For years there was no success. The Jordanians were much less interested in the subject. It was the Israeli authorities, after the unification of the city, who succeeded in bringing together all the factions, and a massive restoration program was initiated. For years one could hear the rhythmic sounds of the stonemason's work. In the piazza in front of the Holy Sepulchre, temporary tin shelters were constructed under which the most skilled masons in the land carved new capitals, columns, arches, and vaults for the church. The dome was practically rebuilt, and some column capitals and arches had to be replaced. Work on the Holy Sepulchre is nearing completion.

In the Jewish quarter the public monuments were in a reasonable state of repair until 1948, when they were totally destroyed after the conquest of the quarter by the Jordanian/Arab legion. When the rebuilding of the quarter began in 1967, it was impossible to repair or restore the principal monuments: the Hurva Synagogue, Nisan Beck Synagogue, the Porat Yoseph Yeshiva, and many other significant buildings were beyond repair. Nothing remained of them except a few walls, foundations, and collapsed vaults. The only synagogues that could be restored were the four small Sephardic synagogues. Although they had been severely damaged, their basic shells remained standing, and they were the subject of careful restoration carried out under the supervision of architect Dan Tanai.

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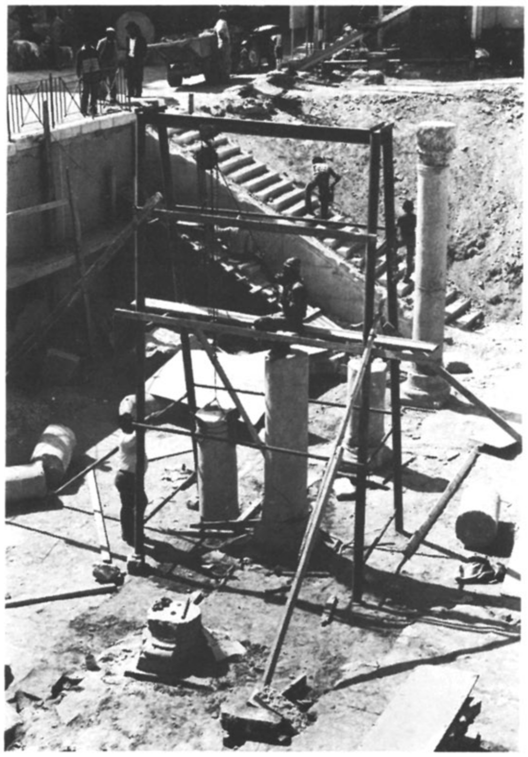

Conditions were quite different in the Muslim quarter, or more precisely, with all Muslim monuments in the various quarters. The two great mosques, Al Aqsa and the Dome of the Rock, had been allowed to deteriorate in the years before Jordan's control of the eastern parts of the city. Under the Jordanians a massive restoration took place, including resurfacing of the Dome of the Rock and the Dome of Al Aqsa with gold and silver anodized aluminum, respectively. In retrospect, it can be stated that the quality of these restorations left much to be desired. The work was carried out by an Italian contractor on a turnkey basis, with little attention to historical exactitude or architectural standards. The Dome of the Rock is the most unsatisfactory, since the large gold anodized aluminum sheets that were used do not have the depth that gold leaf had.

While attention was given to these two principal mosques, the many Muslim historic buildings in the rest of the Old City were allowed to deteriorate. Most affected were the great *madrassas*, bath houses, markets, and libraries constructed during the affluent reign of the Mamelukes. These structures are ornate; the surfaces have a delicate inlay of various colored stones. Without constant repair, the inlay stones fall out. In some cases colored plaster had been used to replace the stones; in many cases these buildings had been allowed to rot away. Such neglect is not inconsistent with similar situations in many Arab capitals. Both Damascus and Cairo, for example, possess treasures of Mameluke buildings whose condition is as poor if not poorer than those in Jerusalem.

After 1967, with the intensity of restorations taking place in both the Christian and Jewish sectors, the municipal authorities brought pressure to bear on the Waqf and other Muslim agencies, urging them to save the monuments before it was too late. A delicate political situation arose concerning the possible procedures for this restoration. The Jerusalem Foundation had obtained funds throughout the world enabling it to initiate restoration in many parts of the Old City. Funds raised from various donors brought about the restoration of the citadel next to Jaffa Gate, Damascus Gate, and the Roman remnants around it, as well as the excavation and restoration of many archaeological remnants around the city wall. It was obvious that with the mayor's talent for fundraising, funds could be obtained specifically for the restoration of some of the Muslim monuments. Both the foundation and the municipality, however, were reluctant to take possession of these monuments in order to bring about their restoration. Expropriation in the Jewish quarter, for example, carefully left out the two principal Mameluke buildings located at the edge of the quarter, the Tashtamuria and the Machkame, in order not to offend the Muslim authorities. As all the other structures were restored around them, they remained dilapidated, crying out in contrast to their surroundings. Thus the vicious circle: the municipality would not initiate restoration for fear of offending the Muslims, and the Muslim authorities did not initiate restoration for fear of having such activity interpreted as an acceptance of the status quo of Israel's occupation of the Arab sector of the city. In the meantime, the buildings deteriorated.

It is natural, therefore, that both faculty and students considered this to be a subject worthy of their attention. Under the direction of Nader Ardalan, a study of the Suq al Qattanin, or the Cotton Market, was carried out by Isabel Renteria. The study also included adjacent bath houses and the vacant land next to them. Ardalan had made contact with the Waqf and had secured its cooperation in the sharing of information and program requirements. Contact was also made with the British School of Archaeology, which had measured and drawn up plans of the area as part of its ongoing effort of documentation and preservation. The Cotton Market itself had been restored some years back by the Waqf. It was an exception — one of the few examples of careful rehabilitation. The shops had been rebuilt, the vaults repaired. But unfortunately the market did not become a vital part of the commercial life of the Old City; many of the shops were closed or unused.

With the guidance of Ardalan, Renteria began the study with an assessment of why the market, in spite of its restoration, did not come into full use. The main reason was that it was not located in the principal channels of movement of pilgrims and tourists and hence could not do enough business in this location. The market connects the El Wad Street (Valley Street) with the Harem el Sharif, but the gate leading to the mount at the eastern edge is not a principal entrance. It is closed to tourists, and few worshipers use this entrance because most use the northwest gate adjacent to St. Stephen's Gate or the gate at the foot of the Street of the Chains. Renteria considered alternative uses and proposed that since the routing problem could not be overcome, the market could be converted to a craft center, combining a craft school and the marketing of the products of craft activities. Thus some of the shop spaces would be used as part of the educational facilities, and the uniqueness of craft products in the area might in time become known and attract tourists.

The bath house adjacent to the market had been closed some years earlier and was in disrepair. Clearly the need for a bath house had changed, since most houses now had running water. On the other hand, Renteria believed that if the bath house were repaired and restored, it would come into use once more. This was corroborated by discussions with representatives of the surrounding community.

Renteria focused her project on a parcel of vacant land between the bath house and the Cotton Market. This is a typical situation in many parts of the Muslim quarter: a small parcel

**2.101** *A fourteenth-century* sabil *(fountain) stands unused and in disrepair in a small square at the end of the Street of Chains.*

**2.102** *Existing ground-floor plan of the* suq *and adjacent structures (source: British School of Archaeology).*

**2.103** *Proposal for the rehabilitation of the* suq *and surrounding buildings includes maintenance of the existing market activities; introduction of craft workshops and exhibition space; construction of an adult education center on the site of a ruined caravansary; conversion of a* hammam *into a working museum of local crafts; and upgrading a functioning* hammam *to contemporary hygienic standards (Renteria).*

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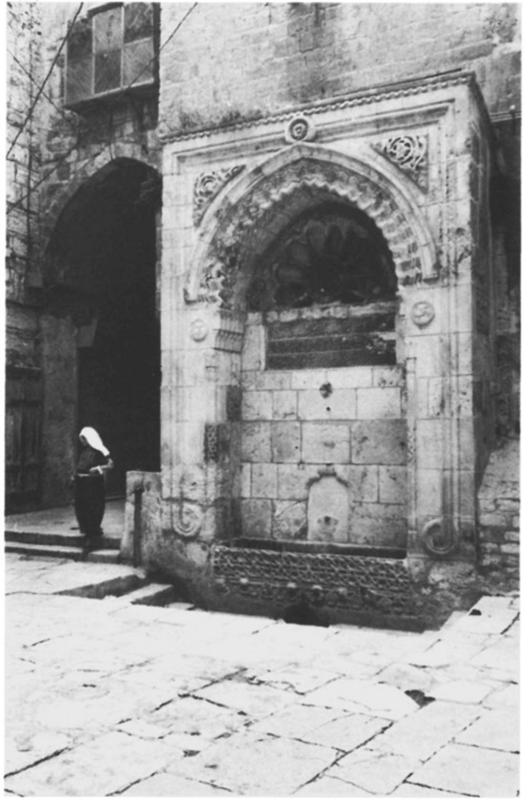

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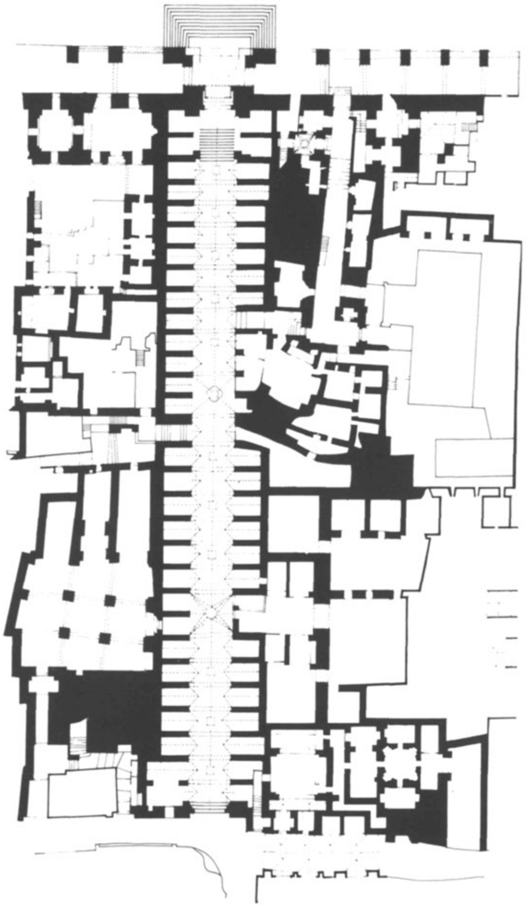

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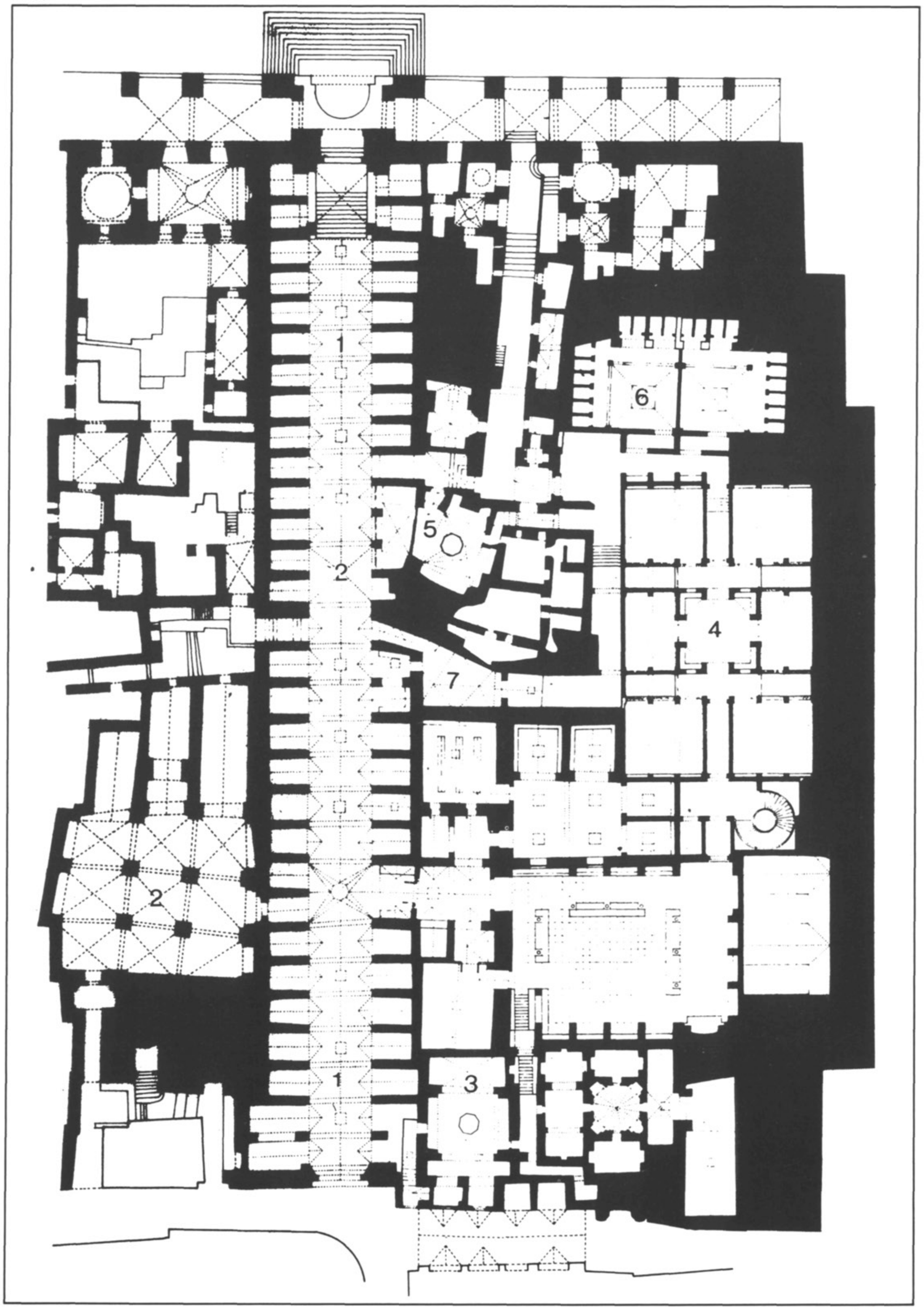

of vacant land next to dilapidated historic buildings. Obsolete uses, such as latrines and makeshift squatter houses, occupy some of the land. The architectural challenge was to demonstrate that new construction could be carried out on the vacant land in harmony with the historic building adjacent to it. The social challenge was to explore possible uses that could be accommodated by this construction, apart, of course, from the need for additional housing. Renteria's explorations led her to the conclusion that this was an appropriate location for a community school, which would be linked institutionally to the craft school to be located in the adjacent area. Having established the program, she carefully wove the new structure into its historic setting. Drawing on the archetypal form of the courtyard, which also had the advantage of bringing daylight into the landlocked building, she devised a building that comfortably abutted the adjacent structures.

Renteria's project constituted only a small part of the total inventory of significant Muslim buildings. There are in the Old City today approximately 250 historic structures worthy of conservation, all unused, in disrepair, or used as housing for squatters. Assuming that many of these structures should be converted to a public use rather than a residential one, the challenge is twofold: (1) to explore the appropriate uses that would serve the Muslim community, not only of the Old City, but of Jerusalem at large; and (2) to devise a procedure by which the physical restoration of the buildings could commence. Clearly the problem is one beyond that of available resources. The Waqf has available considerable funds for the upkeep of the holy places of Jerusalem. However, it has understandably been reluctant to initiate any restoration program, awaiting the resolution of the political status of the city. But this holding pattern exacts a high price; in a few years some of the structures will be beyond repair.

The absence of vital institutions in the Old City is working to the disadvantage of the Muslim community. With the affluent leaving the Old City and without any institutions that would draw them back, the Muslim hold on their parts of the Old City will only be weakened, quite contrary to the objectives of the Waqf. It therefore seems both expedient and pragmatic, from the cultural, social, and realpolitik points of view, for this work to proceed.

**2.104** *Section through the* suq *and the trade school (Renteria).*

**2.105** *Interior view of the Suq al Qattanin (Cotton Market).*

**2.106** *The outer arch of a school, decorated with tricolored, wedge-shaped stones. Although poorly maintained, it is a reminder of past grandeur.*

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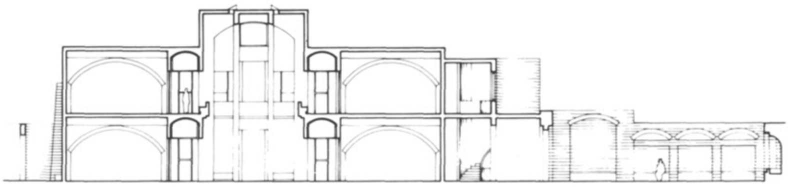

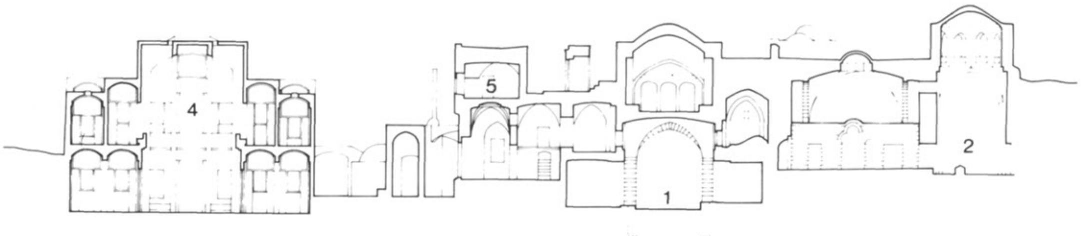

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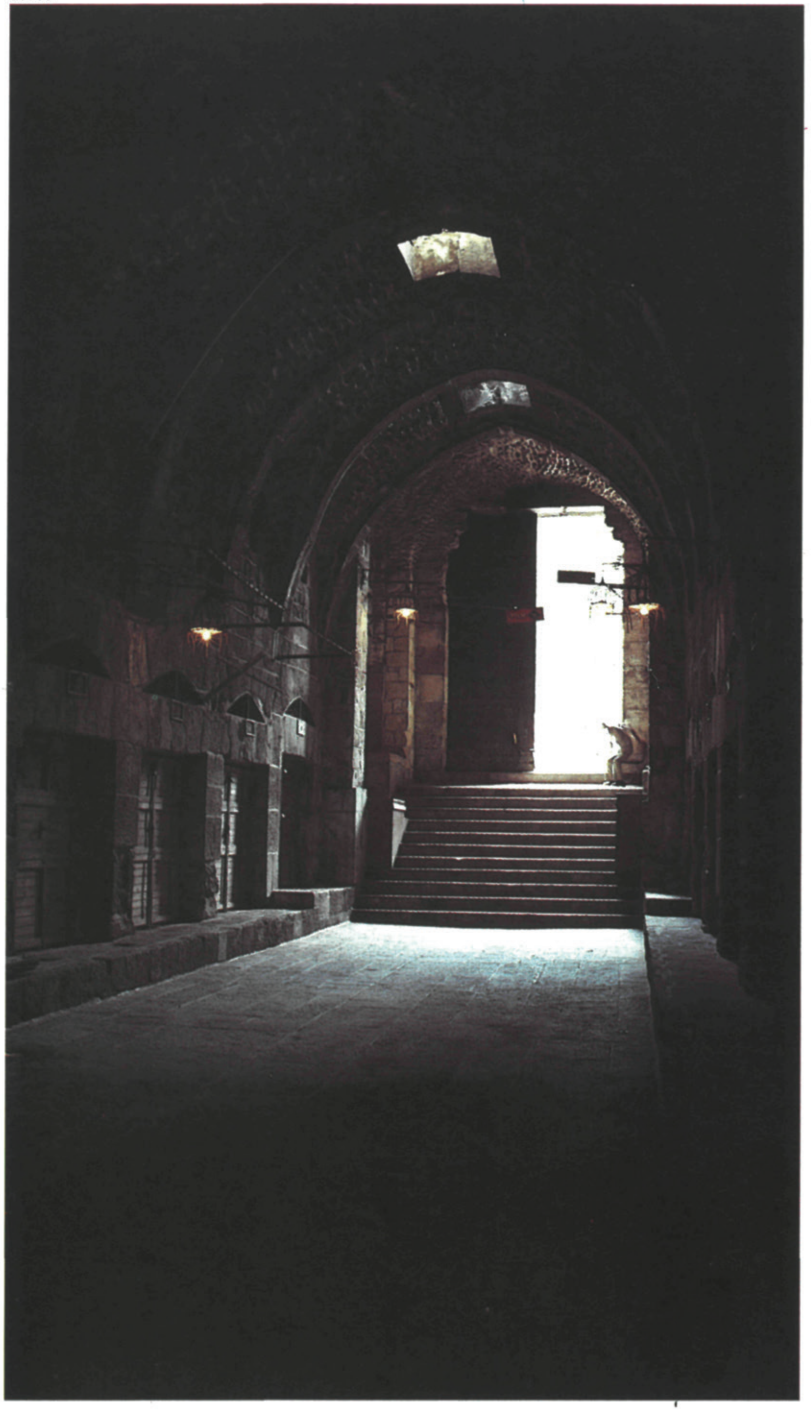

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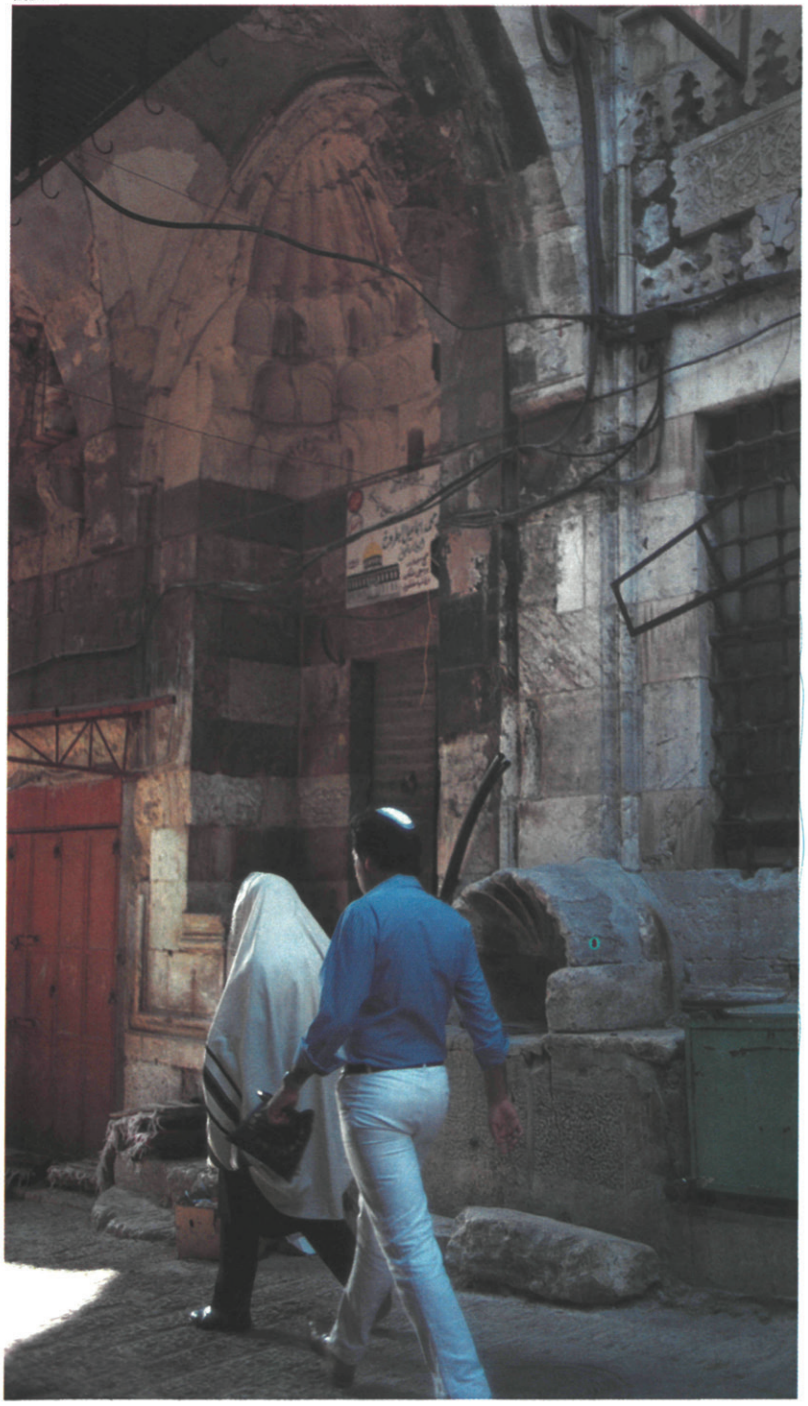

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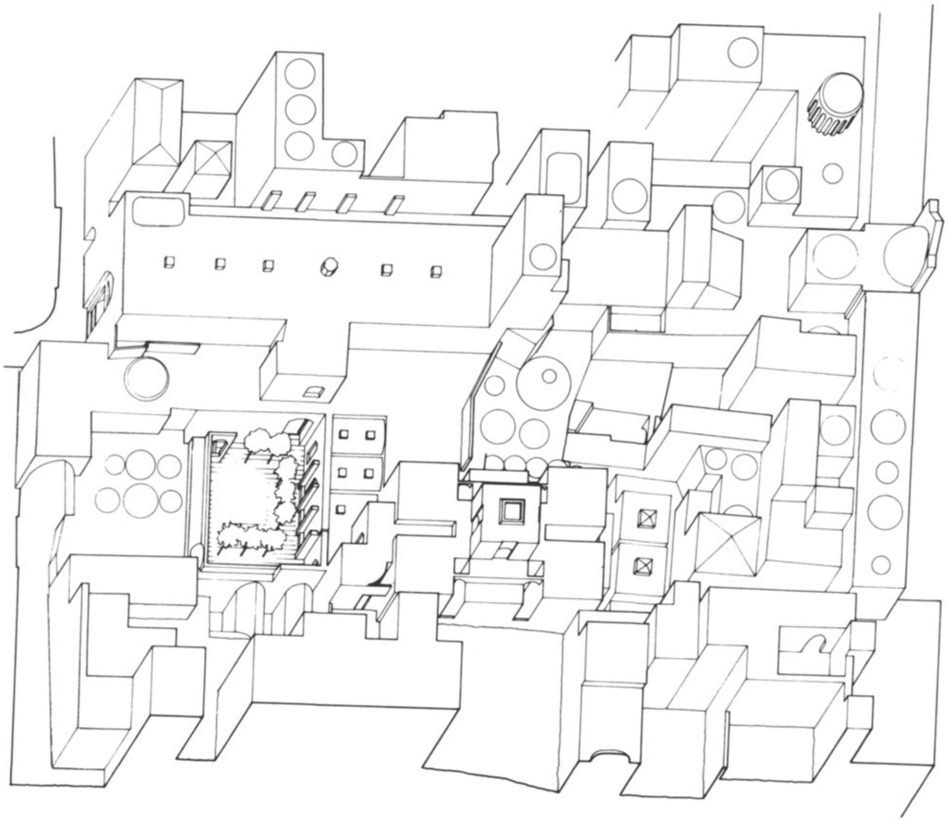

**2.107** *Axonometric view of proposal (Renteria).*

## SUMMARY

Although it covers a kilometer square and is inhabited by only 24,000 people, the Old City is an extremely complex mosaic that constitutes the essence of Jerusalem's heritage. Much goodwill and considerable resources are being directed toward the preservation of the Old City, but it is nevertheless caught between two forces that are seemingly unrelated but whose cumulative effect is considerable: first, the growing number of tourists and pilgrims and the pressures they bring upon the Old City, and second, the political conflicts affecting the city. The impact of tourism has already been discussed. It shows its mark every day: in the expanses of asphalt outside the gates, paved to accommodate tourist buses; in the thousands of cars covering the landscape on holidays; in the ever-changing character of the market, where mass-produced tourist goods slowly replace traditional crafts; in places where sections of the market that have served the local population for centuries are converted because the tourist trade is more profitable than supplying goods and services to the resident population. The political conflicts mean that there is no uniformity or cooperation in the restoration efforts in the Old City. Great resources have been spent renovating and restoring the Jewish quarter. The wealthier Christian institutions have similarly moved forward, but the Muslim sections of the Old City remain neglected.

The real danger is that nothing at all will be done, thus allowing the prevailing forces to take hold. For example, since Jaffa and St. Stephen's gates can be entered by car, it is amazing to see through what circuitous alleys cars can be brought through to the depths of the Old City. Vehicles can sometimes be seen next to the Cotton Market and near the Street of the Chains, not to mention the penetration of vehicles deep into the Christian and Jewish quarters through the New and Jaffa gates. Unless there is a categorical and uncompromising decision to bar all vehicles, this infiltration will continue. But the unilateral decision to bar vehicles without providing essential services is bound to lead to social and political unrest, demonstrations, and conflicts between the authorities and local residents. The recent demonstrations by the residents of the Jewish quarter protesting the unfulfilled promise to provide parking are only the beginning of this process. Hence, it seems reasonable to conclude that if the Old City is to be protected from vehicles and all that is related to them, alternative facilities must be provided next to the gates and adjacent to each quarter. Parking for residents is essential; it is not something that should be overlooked or postponed. This view, however, was not one that was unanimously endorsed by the students and faculty. Many felt that those who wanted the privilege of living in the Old City might have to do without the convenience of parking. If it works for Venice, it was stated, it should work for Jerusalem. Since these policies also affect the character of the population, the trend toward or against gentrification, and the relationships among the four quarters, the decisions made about these issues have far-reaching implications.

More unanimity appeared to exist concerning the pilgrims. It was agreed that one could not always distinguish between pilgrims and tourists and that their numbers would continue to grow. No municipal or state entity could put restrictions on their visits or discourage them from coming to Jerusalem. Hence, with open access to the holy places for all three religions, the impact must be accommodated. The areas surrounding the gates within and outside the walls are obviously the key to this strategy. It is also quite obvious that it is precisely the gate areas that are now the most neglected, each in its own way an eyesore and an environmental hazard. At Dung Gate there is congestion outside with parking and buses, and a dusty, undefined area within. Jaffa Gate has congestion inside, with parked cars and pedestrians weaving in and out of entering traffic; outside there is a sea of asphalt with dozens of buses and hundreds of cars. Damascus Gate has had a face-lift around the gate itself, but the vacant land outside looks more like a giant parking lot for buses and trucks than the principal entrance to a holy city.

Although there was no consensus as to the exact measures that should be taken — for example, some students felt that all services should be concentrated at the gates, whereas others felt that they should be further removed from the city wall into another zone — there was a consensus that urgent action is necessary. Since the area around Jaffa Gate was the subject of intensive study by the city, KARTA, and its consultants, the attention of the students focused on Damascus and St. Stephen's gates. St. Stephen's Gate could be studied in relationship to the Muslim quarter and the areas immediately surrounding the gate. But the area outside Damascus Gate could not be explored without an understanding of its relationship to the Arab and Jewish business districts and to the northern approach to the city. Thus Damascus Gate was recognized as a key area because it serves as a bridge between the communities, between the old and the new cities, between the Israeli and Arab business areas, between the communities to the north and those at the heart of the city. It came to be the area of most intensive study.

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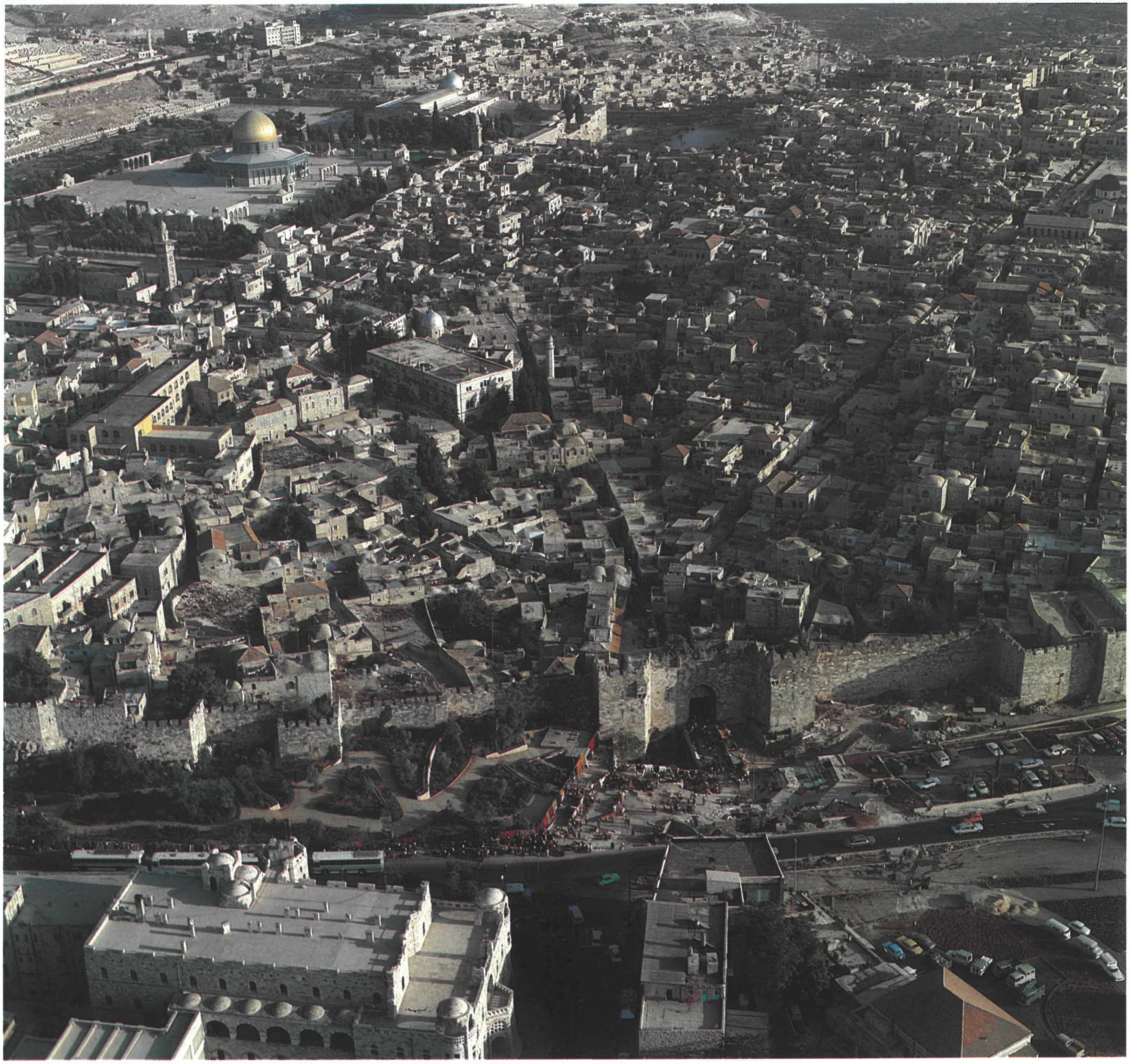

# 3 BRIDGING COMMUNITIES: DAMASCUS GATE

If one had to invent a project to demonstrate the *raison d'être* of urban design, the Damascus Gate triangle would be a perfect one. All the ingredients, problems, and opportunities that have made urban design a necessary activity are demonstrated in this site. First, there is a major parcel of land located in the heart of the city, which, because of historical circumstances, has remained vacant. Second, there are pressures to use this land to resolve the down-to-earth problems of parking, merchandise shipping, and road construction. Third, there is the opportunity. The manner in which this parcel is developed will have a profound impact on the character of the city. The decision about what *should* happen on this site will not emerge from reports outlining traffic and service problems but only from a vision of the site's image and spirit and what it can mean to future generations.

A design for this area must therefore deal with the what and the how. It must resolve problems but also transcend them. It must promote the efficient workings of the city in that area, not unlike the need to assure that the plumbing and structural systems in a building work well. But a working plumbing system does not make for architecture, and efficient traffic flow will not in itself make an urban place. In the Damascus Gate triangle, one must first "invent the program," that is, the *what*; one must then evolve the spatial framework, that is, the *how*; and one must then go further and make sure that there is an efficient system of networks working in tandem with the rest of the city. And all this must be accomplished within the most severe economic and political constraints.

Several groups of students and faculty devoted considerable attention to the Damascus Gate triangle. The first group of students worked under the direction of Krauss, Lane, and Safdie. In the subsequent year, a joint studio of Architecture and Urban Design was carried out under the direction of Koetter and Safdie. Finally, at the termination of the studies, a special program was established in which three outstanding graduates of the Graduate School of Design were granted fellowships that enabled them to reside in Jerusalem for one year and to devote their entire energies to the development of the scheme for this site, working in collaboration with the city engineer, consultants, and a faculty steering committee.

The attention focused on this one site was not accidental; it resulted from the conclusion that the Damascus Gate triangle was a key to the future character of Jerusalem. In this area lay the opportunity to determine the nature of the connection between the Old City and the new and between the Arab and the Israeli business districts, and to influence the character and experience of the entrance to Jerusalem from the north. Furthermore, since the site is vacant, inaction would mean action by default. In the absence of a plan and a vision, day-to-day forces would bring about change and determine uses and development on the site without any evaluation of their impact. This has already happened. Part of the site has become a truck staging area, even though no plan has ever proposed or approved such a use; it simply evolved. Some parts of the site have become summer stalls for selling watermelons; others have been taken over as terminals for *sheruts* (group taxis); and still others have become the locations for dumping of surplus soil, which has raised the land level in parts of the site by as much as six meters. Each of these interventions has changed conditions and constraints on the site, yet none has ever been considered in terms of its desirability or impact on the city. Hence the urgency of an affirmative plan to prevent continued unplanned drift.

3.1 *View of the Damascus Gate area. Prominent features include the edge of the Arab business district on the left, the Old City walls and Damascus Gate in the center.*

## THE PROBLEMS AT DAMASCUS GATE

Damascus Gate is the most active entrance to the Old City markets and the center of community life for the Arab population. Because many of the principal markets within the Old City converge on it, while the major regional transportation facilities serving the Arab population are outside it and adjacent to the business district, the gate area has become a narthex for the precint. This intensity of use has caused problems. Some are vehicle related: areas are needed for bus stations, group taxis, handling of goods, and, parking for visitors and residents. Other problems are unique to this area and transcend the normal vehicle handling problem. Since the Old City is a pedestrian zone, every pound of vegetables, every piece of tourist memorabilia, and every item sold or made in the workshops must first arrive at Damascus Gate, be unloaded, transferred to carts, and transported by man or animal into the markets. Similarly, every piece of garbage or refuse generated within the Old City must be transported to the exterior, to be disposed of in the city's network.

There are also regional issues that focus on the gate area. Heavy traffic presently traverses the area on an east–west loop road that surrounds the Old City. Traffic coming from the north is channeled through the narrow historic route along Nablus Road. With hundreds of thousands of new residents settling in the northern part of town, the increased traffic requires a major artery leading to the gate. The proposed route for this artery brings it through what was formerly the no-man's-land along the point that was once Mandelbaum Gate (the only connection between east and west Jerusalem during the nineteen years of division) and then into the northern apex of the triangle, from there connecting (somehow) east and west. By consensus, this alignment through open land is the most economical and probably the only feasible scheme. With the road already under construction in the northern sections of the city, the pressures for its connection within the triangle are enormous.

The city's growth has also exerted pressure on this land. Although the area now accommodates two bus stations, growing numbers of riders and buses require expansion of these facilities. As commercial activity has increased, along with the affluence of the residents, vehicle ownership has grown and with it the need for parking. Growth is also affecting both business districts. The Arab business district is contained by residential development, and the one area where expansion can take place without being disruptive to residents is toward the triangle. The Israeli central business district is also expanding, but primarily toward the west.

Poised directly east of the triangle is the Garden Tomb. In the tradition of fundamentalist Protestant groups, Golgotha, the place of the crucifixion, is on a rock escarpment some four hundred yards north of the city wall east of Damascus Gate. The Garden Tomb was established in that area by the Anglican church, adjacent to an ancient Muslim cemetery. During the Jordanian administration of Jerusalem, when the Christian institutions had little influence, the central East Jerusalem bus station was constructed immediately adjacent to the Garden Tomb, with bus stalls facing the site of the crucifixion. Protests at the time were unheeded. Since the city's unification, Christian organizations have approached the municipality and asked that the bus station be relocated. Funds have recently been committed for relocating the station and converting the area into a park, an extension of the Garden Tomb. Thus not only do the bus facilities require expansion, but pressures are also being brought to bear for relocating the existing station elsewhere. The only area that could easily accommodate a new bus station is the Damascus Gate triangle.

The more profound question is what *should* happen on this site. There are those who envisage the entire area as a large urban park. This vision is shared by those who believe that

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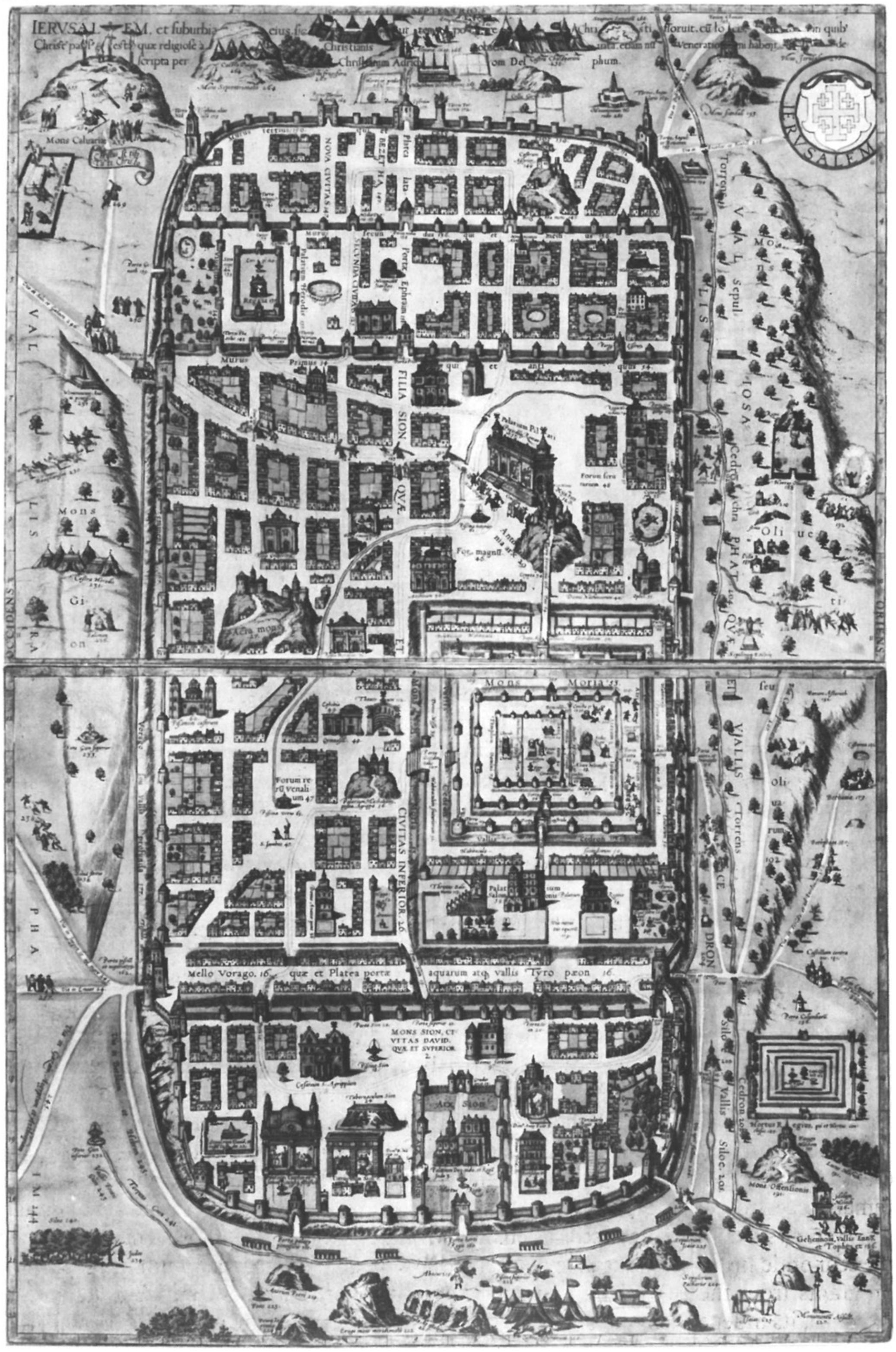

Mello Vorago, 16. quæ et Platea portæ aquarum atq vallis Tyropæon 16.

**3.2** *A late sixteenth-century pictorial map of Jerusalem made in Cologne. Damascus Gate and the area north of it were included in the city wall.*

a park is the most attractive and logical use for this area and would serve the citizens of Jerusalem most appropriately, and also by those who favor the park because of an inherent conservatism, a preference for the status quo. Among the Arabs, there are those who feel that the triangle is a logical place for expansion for their central business district. This position is taken particularly by those whose vision of the city consists of separate business districts for Israelis and Arabs (that is, a divided city). Development of the site under the present circumstances is unlikely to give them control of it; hence postponement of development might be best. Then there is the pragmatist group, with its constituency in many government offices: the transportation engineers and other functionaries who view the site as a solution to long-standing issues — a place for roads, for a bus station, for servicing the Old City. Finally, there are the optimists, whose "latter-day" vision of the city is one of Arabs and Israelis — Muslims, Christians, and Jews — living in harmony with one another. Recognizing that in the past it was in the marketplaces and commercial centers that the diverse peoples of Jerusalem were brought together, they view the triangle as a pivotal point in which a new center would weave together the Jewish and Arab business districts and would bring the peoples of Jerusalem closer together.

There are, of course, many permutations and combinations of these visions for the site. Urban design is a process of trade-offs, and satisfying all objectives is almost always impossible. Hence the question becomes, which objectives should be compromised? Sometimes what appear to be conflicting objectives can be reconciled by using ingenuity. For example, one can have a large parking structure that is landscaped on the top and thus becomes a park. One can provide commercial areas but also open space. One can consider changing activities through the seasons. What is clear about any of these options is that there is a price tag attached to them; layering of uses is invariably more expensive.

In terms of site constraints, the difference between the historic and the existing topography of the site appears to top the list. The site has been extensively filled, resulting in very unsatisfactory effects. Viewed from the north, even at a distance of three or four hundred meters, Damascus Gate appears to be buried; only its uppermost section is visible. Reshaping the topography might improve the visibility of the gate. Similarly, the presence of the wall and the silhouette of the Old City are important assets that can easily be blocked by massive buildings. Hence any additional buildings in the area must be examined for their compatibility with the historic fabric.

Development proposals for the site must also consider that excavation is risky because of the possibility of archaeological discoveries. During the Herodian period, the city expanded and a third wall was built northward, in the present location of the northern tip of the triangle. This means that two thousand years ago practically the entire triangle was within the city walls. The probability of uncovering historic structures if excavation is carried out is, therefore, very high. Archaeological discoveries are obviously of interest, but they have also been a major problem in Jerusalem's recent development. The National Department of Antiquities has full authority to determine what happens on a site once an archaeological remnant is discovered. Often they can require construction to be suspended altogether and the historic relic uncovered. They can also allow the new structure to be built on top of the relics, but require that they remain accessible to the public. The cost in either case must be borne by the owner of the land.

Perhaps the greatest constraint on any proposal is the necessity of coming to terms with the economic situation. Jerusalem is, after all, a very poor city. It depends for its income mostly on grants from the central government. Compared with other cities in Europe and North America, its independent tax base is extremely small. Much of the work of constructing parks

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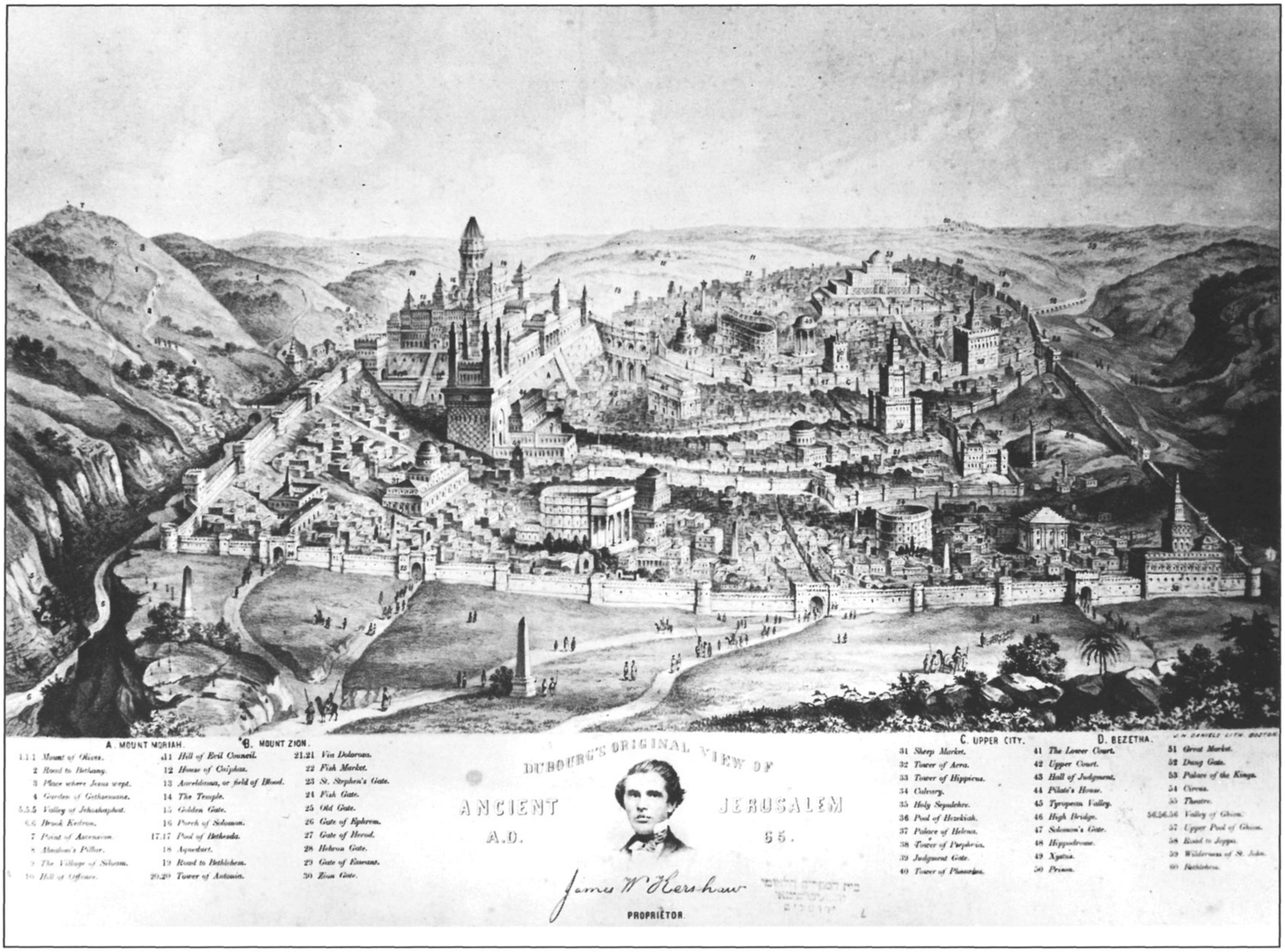
A. MOUNT MORIAH.
B. MOUNT ZION.
C. UPPER CITY.
D. BEZETHA.
J. N. DANIELS LITH. BOSTON
DUBOURG'S ORIGINAL VIEW OF
ANCIENT JERUSALEM
A.D. 65.
James W. Hershaw
PROPRIËTOR.
1.1.1 Mount of Olives.
2 Road to Bethany.
3 Place where Jesus wept.
4 Garden of Gethsemane.
5.5.5 Valley of Jehoshaphat.
6.6 Brook Kedron.
7 Point of Ascension.
8 Absalom's Pillar.
9 The Village of Siloam.
10 Hill of Offence.
11 Hill of Evil Council.
12 House of Caiphas.
13 Aceldama, or field of Blood.
14 The Temple.
15 Golden Gate.
16 Porch of Solomon.
17.17 Pool of Bethesda.
18 Aqueduct.
19 Road to Bethlehem.
20.20 Tower of Antonia.
21.21 Via Dolorosa.
22 Fish Market.
23 St. Stephen's Gate.
24 Fish Gate.
25 Old Gate.
26 Gate of Ephrem.
27 Gate of Herod.
28 Hebron Gate.
29 Gate of Essenes.
30 Zion Gate.
31 Sheep Market.
32 Tower of Acra.
33 Tower of Hippicus.
34 Calvary.
35 Holy Sepulchre.
36 Pool of Hezekiah.
37 Palace of Helena.
38 Tower of Porphyria.
39 Judgment Gate.
40 Tower of Phasaelus.
41 The Lower Court.
42 Upper Court.
43 Hall of Judgment.
44 Pilate's House.
45 Tyropeon Valley.
46 High Bridge.
47 Solomon's Gate.
48 Hippodrome.
49 Xystus.
50 Prison.
51 Great Market.
52 Dung Gate.
53 Palace of the Kings.
54 Circus.
55 Theatre.
56.56.56 Valley of Gihon.
57 Upper Pool of Gihon.
58 Road to Joppa.
59 Wilderness of St. John.
60 Bethlehem.

**3.3** *Lithograph from 1865 made by J. N. Daniels from Boston. Imaginary view of the walled city of Jerusalem from the north. Damascus Gate area is in the foreground.*

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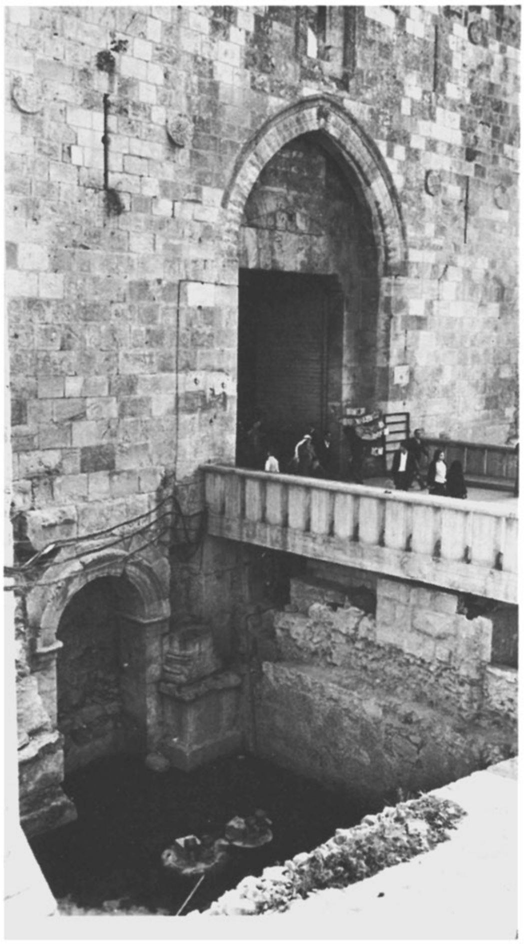

and playgrounds has been achieved through independent fundraising carried out by Mayor Kollek through the Jerusalem Foundation. But even there, resources are limited. Whatever plan is put forth for this site must therefore be one that can be implemented slowly as resources become available. It must be a modest plan that does not depend on an investment in infrastructure beyond the city's capability.

A closely related issue is the great difficulty of expropriation and demolition of buildings in Jerusalem. Existing structures are difficult to acquire, even though the municipality has the power of eminent domain, in part because of the high cost of implementation, but also because of the reluctance to evacuate residents forcibly, a difficulty compounded when the owners are Arabs and there are political overtones to land acquisition.

Underlying the planning process in Jerusalem is the pluralistic character of decision making. One man's vision has no chance without some consensus. This is clearly different from some well-known historical cases of urban development, such as Napolean III's and Baron Hausmann's vision of Paris, and even some recent cases, such as Shahestan Pahlavi, the plan developed for the heart of Tehran for the Shah; Albany's mall; or Kenzo Tange's plan for the new capital of Abuja, Nigeria. The process by which the program for a site like Damascus Gate would emerge would be lengthy and complex. Even the most compelling vision put forward by an urban designer would be the subject of considerable discussion. Experience has shown that consensus in Jerusalem today is *impossible*. But this reality did not, and perhaps should not, trouble the students. The studio situation recreated only one small part of the process. In reality the students would be given a variety of program requirements, policies, and strategies, representing the views of the City Council and various community groups. In the context of the studio, however, they were told it was up to them to put forward

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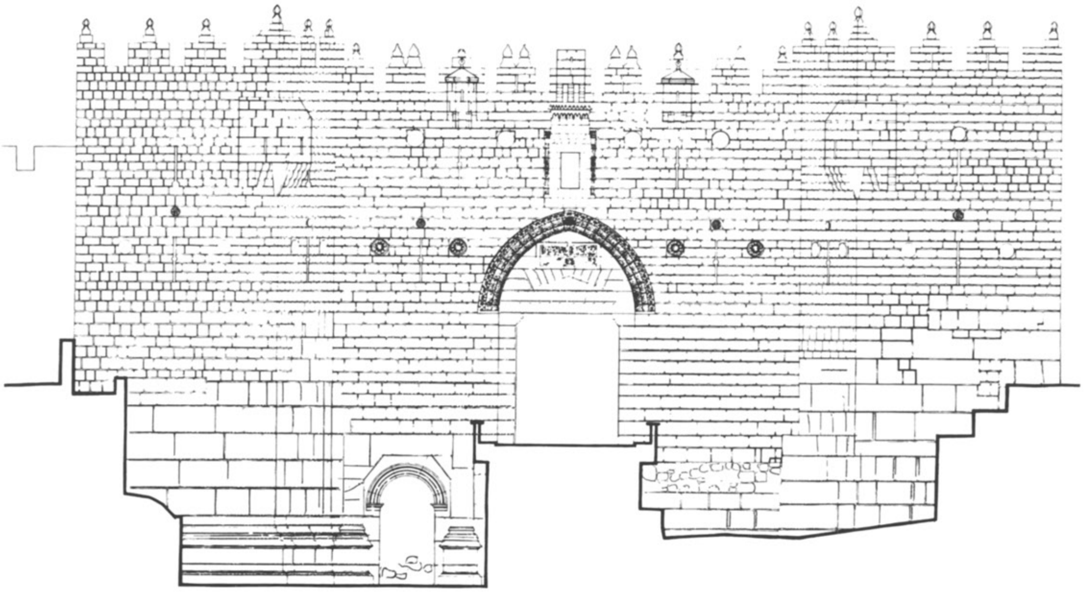

**3.4** *Damascus Gate is the most ornamental gate in the Old City. The ornaments are an integral part of the fortifications of the ramparts.*

**3.5** *Street leading to the gate, a view from the late nineteenth century. The complexity of the fortifications is easily noticed from inside the walls.*

**3.6** *Damascus Gate was built by Suleiman the Magnificent in 1517 and sits atop a Roman arch dating to Agrippa, king of Judea.*

**3.7** *Elevation of Damascus Gate, 1970.*

a program they felt to be the most appropriate for the site, thus combining the roles of the policymaker and the designer. Many of them had sufficient professional experience to not be naive about this idealized situation and to recognize that whatever proposal they made would be the first scene in the first act of a prolonged play.

What made the site extremely potent in demonstrating the power of urban design, however, was that whatever program one adopted, the symbolic meaning of its formal expression was unavoidable. Jerusalem, after all, is the city of symbols. Every symbolic gesture is amplified, taking on meanings that in other places might remain dormant or unobserved. Consider, for instance, that a market might be an approriate use for this site — it would take advantage of transportation functions and also create a bridge between the communities. Every detail has an impact: if the entrance to such a market faced the Damascus Gate, running north–south, it would have very different connotations than if it ran east–west. If the entrance faced west, it would appear to give more importance to the connection to the Israeli side; conversely, facing east, it would appear to favor the Arab side. Running north–south, it might take on the qualities of a barrier, a separator between east and west.

Furthermore, any scheme that creates an axial composition introduces the problem of having to place a building at the termination of the axis. Hence, in schemes where arcades or boulevards are proposed, focusing on the gate at one end, there is a need to counterbalance on the other axis. If the counterpoint is a bus terminal, a great deal of importance is placed on this utilitarian activity. Any institutional building would be politically charged; a city hall, for example, would become a statement on the future political structure of the city. A Christian, Jewish, or Muslim institution would slight the others. An international institution would be construed as a challenging statement about the city's sovereignty. The more formal the axis, the more charged would be the issue of its termination. Hence, as we embarked on developing and evaluating the designs, it was both the program and its formal interpretation that had to be evaluated.

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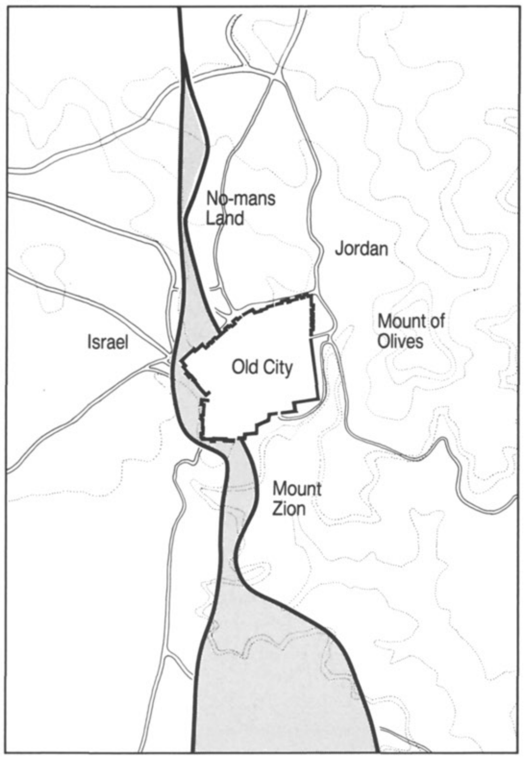

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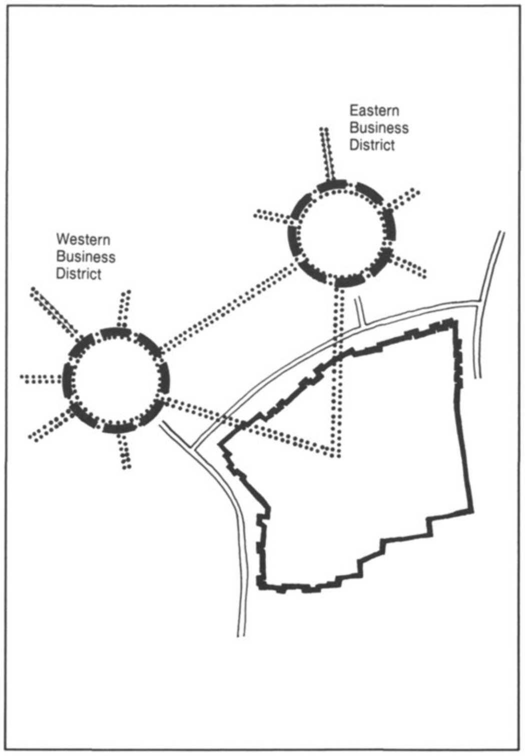

## EXPLORING THE PROGRAM: HOW TO BRIDGE BETWEEN COMMUNITIES?

Students had to consider that each proposed use had implications for the primary objective that had been established: to create a bridge between the communities. One possible use was to make the area into a park. There are, of course, many different kinds of parks — passive, active, programmed. The idea of a central park on the site satisfied the desires of certain segments of the community, but it was not clear whether it would draw the communities together. Would both Arabs and Israelis use and enjoy such a park, or would it be taken over by one of the groups?

Another obvious use for the Damascus Gate area was commerce, both retail shops and offices. There was a consensus that shops, whether a sophisticated shopping center or a farmer's market, would draw people from all segments of Jerusalem and hence bring people together. But there are many ways to develop retail activity on the site that could influence whose turf it became. If development occurred under the auspices of a single developer, would there be an opportunity for Arab entrepreneurs to participate? Would the shops be sold or rented? Could a certain quota of shops be available to the Arab population to accommodate the expanding needs of the Arab central business district? Beyond that were even broader questions of feasibility. What was the overall demand for additional retail and commercial spaces in Jerusalem? With the business district expanding westward and 250,000 square feet

**3.8** *Diagram showing the 1948 border between Jordan and Israel.*

**3.9** *As a result of the city's division, commercial centers arose on each side of the border: the Jaffa–Ben-Yehuda–King George triangle on the Israeli side and the area immediately outside Damascus and Herod's gates on the Jordanian side.*

**3.10** *The Garden Tomb, located outside the present city walls, is considered by some Christians to be the actual site of Golgotha, as declared by General Charles Gordon in 1883. Currently the area south of the Garden is crowded with a bus station.*

**3.11** *View from the city wall looking west toward Musrarah. In the background is Notre-Dame de France.*

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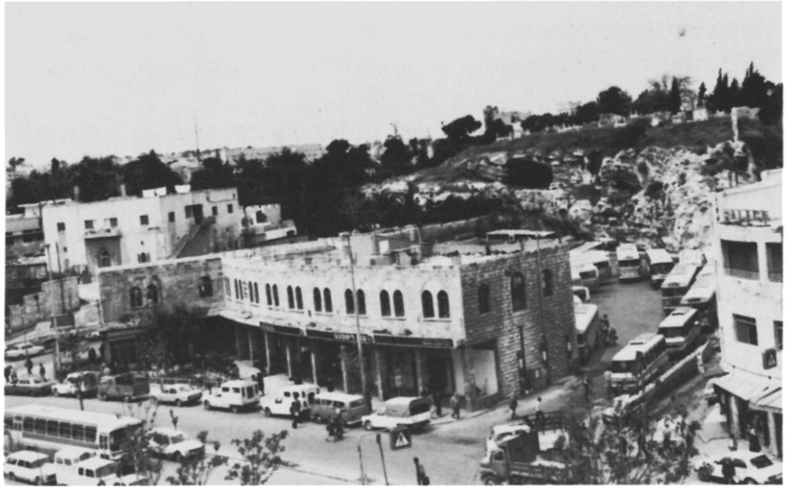

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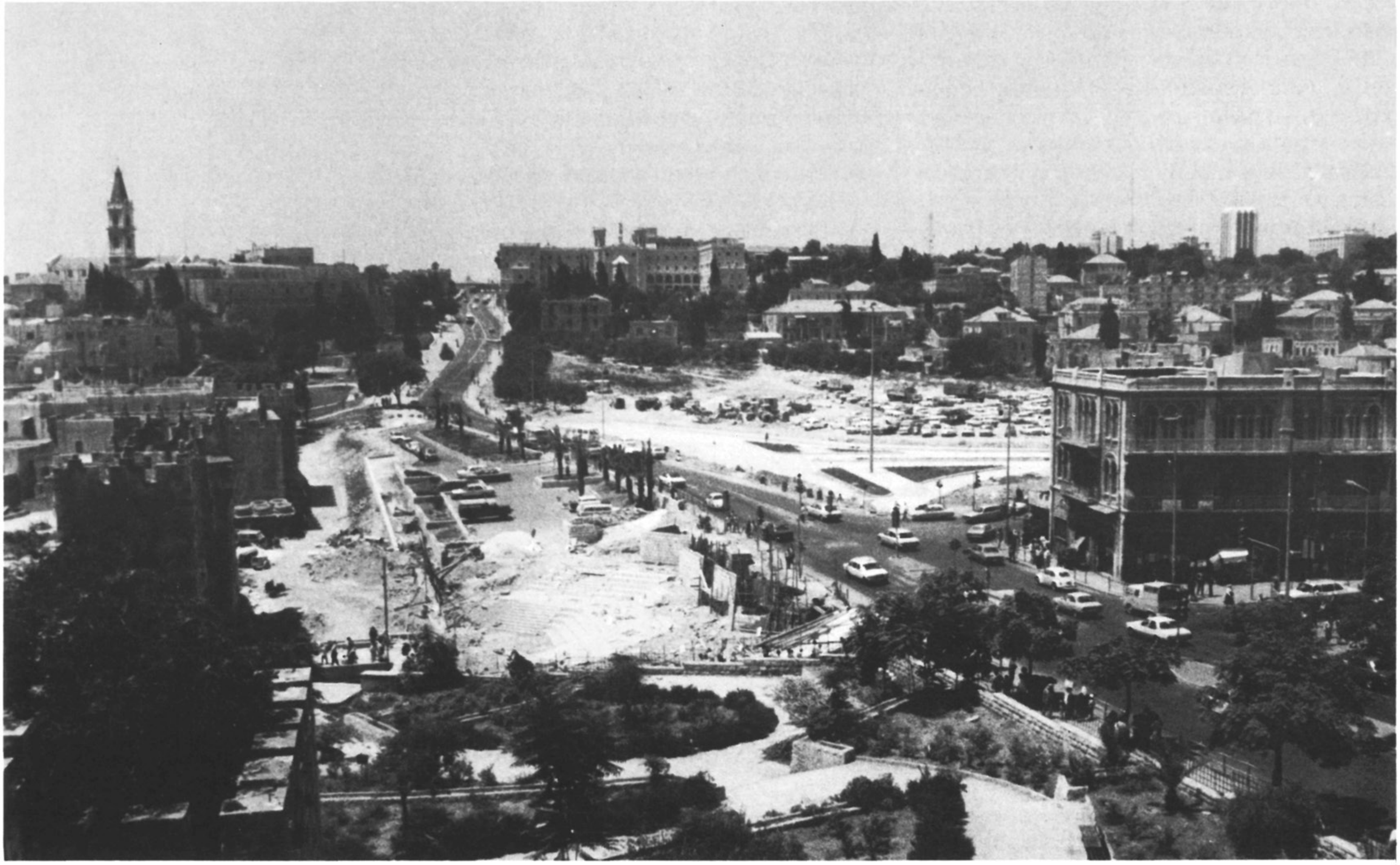

of retail shops planned in Mamilla (still to be constructed and rented), was it not an overly optimistic assumption that retail spaces could be developed and marketed in Damascus Gate? Planners in the municipality were skeptical and opposed a plan that would create yet another retail center.

Housing is always in demand in Jerusalem, and one could almost automatically assume that if land were made available at a reasonable price (or even at an unreasonable price), it would be snapped up. But on this site, housing could not be treated as a neutral commodity. With the Musrara neighborhood, a low-income militant community of North African Jews, to the west and the Arab central business district and residential areas to the east, the question became housing for whom? The western part of the triangle would unquestionably become an extension of Musrara. The eastern side might accommodate Arabs. Could or should one try to accommodate both Arabs and Jews in a single development on the site?

Finally, there was the possibility of utilizing part of the site for institutions. Jerusalem is, after all, the city of institutions: university buildings; international institutes for archaeology, history, religion; museums of various kinds; and so on. The presence of institutions is always charged in Jerusalem, since they are invariably identified with a particular segment of the population or a particular international constituency. It would be necessary, therefore, to tread delicately in proposing any institution on the site.

The service function of the site also aroused controversy, particularly in regard to the bus station. If the central Arab bus station by the Garden Tomb and the annex station were relocated to the site, how large should the new facility be? How many lines should end up there? What should be the holding capacity for buses? All of these questions had far-reaching economic and spatial implications. The city and government transportation planners prepared a program in which they assumed that the bus station should accommodate all the lines of the two existing stations plus some additional lines and provisions for future growth. The result was a recommendation for 45 active bus bays and 115 bus-storage parking spaces for midday layover, with a total of 160 buses. For this to be accommodated on a single level, a load area of over 16 hectares would be required. Overwhelmed with these statistics, the faculty and students wanted to be in a position to make their own judgment about these numbers. A workshop in the City and Regional Planning Department at the Kennedy School of Government chose the transportation facilities at Damascus Gate as a subject of study. During the field trip, students collected statistics, charted bus routes, interviewed bus companies and drivers, and developed a program. After examining transportation options, the workshop concluded that both buses and *sheruts* should be accommodated in the Damascus Gate area, with 75 parking spaces for *sheruts* and 71 bays for bus loading and unloading. No space was to be provided for midday bus parking, since the study concluded that this would best be provided offsite in a less central area.

**3.12**

**3.12** *Vehicular and pedestrian traffic in front of the "half-buried" gate.*

**3.13** *View looking east across the Damascus Gate triangle from Notre-Dame de France.*

**3.14** *Rubble and garbage now obscure the original level of the ancient Tyropoeon Valley, which runs southward through the Old City.*

**3.15** *(Overleaf) Panoramic view looking north to Ha Nevi'im Street. Contesting, and often conflicting, uses for the site include a bus station, parking for cars and taxis, trucking, and other transportation uses. In the foreground is the newly constructed amphitheater in front of the gate.*

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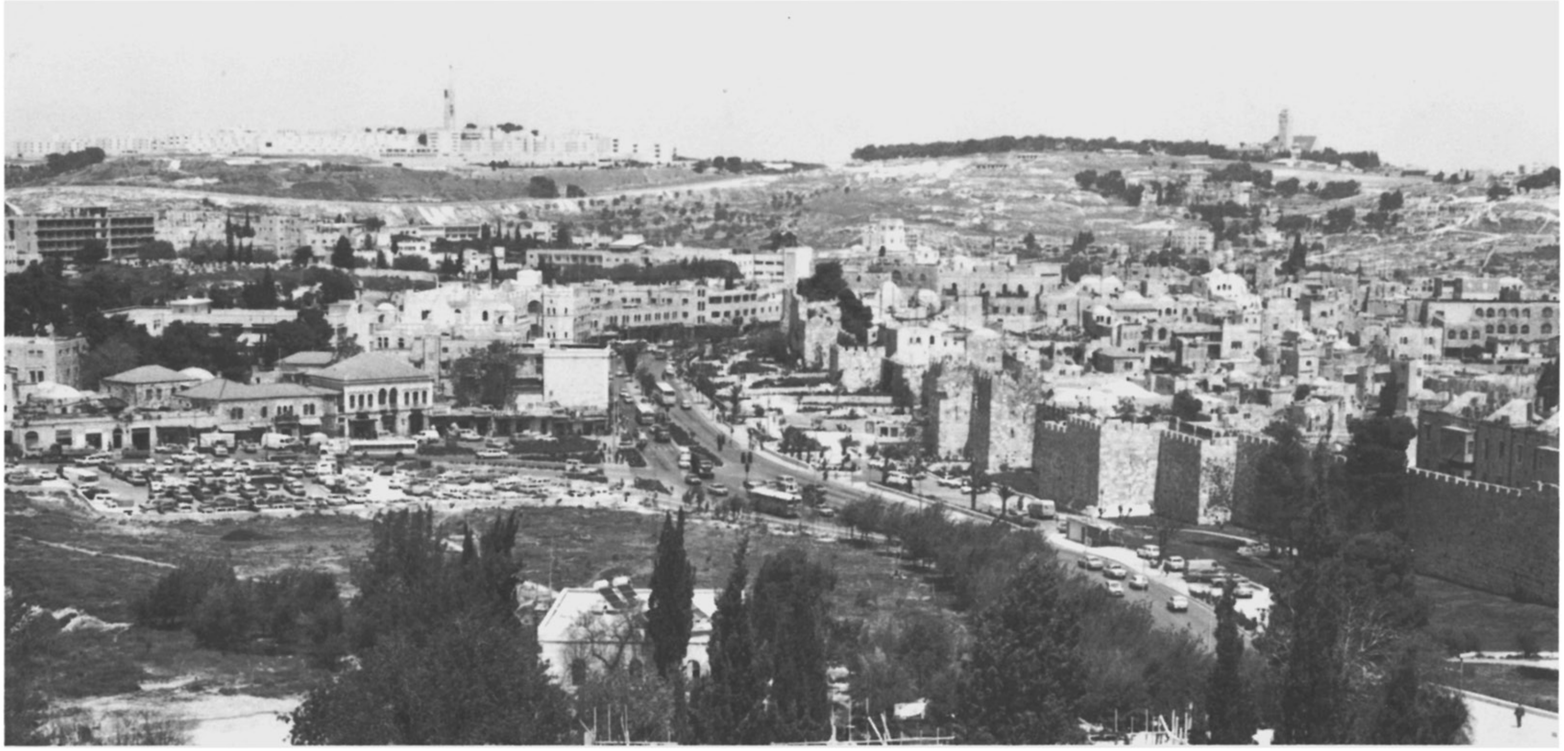

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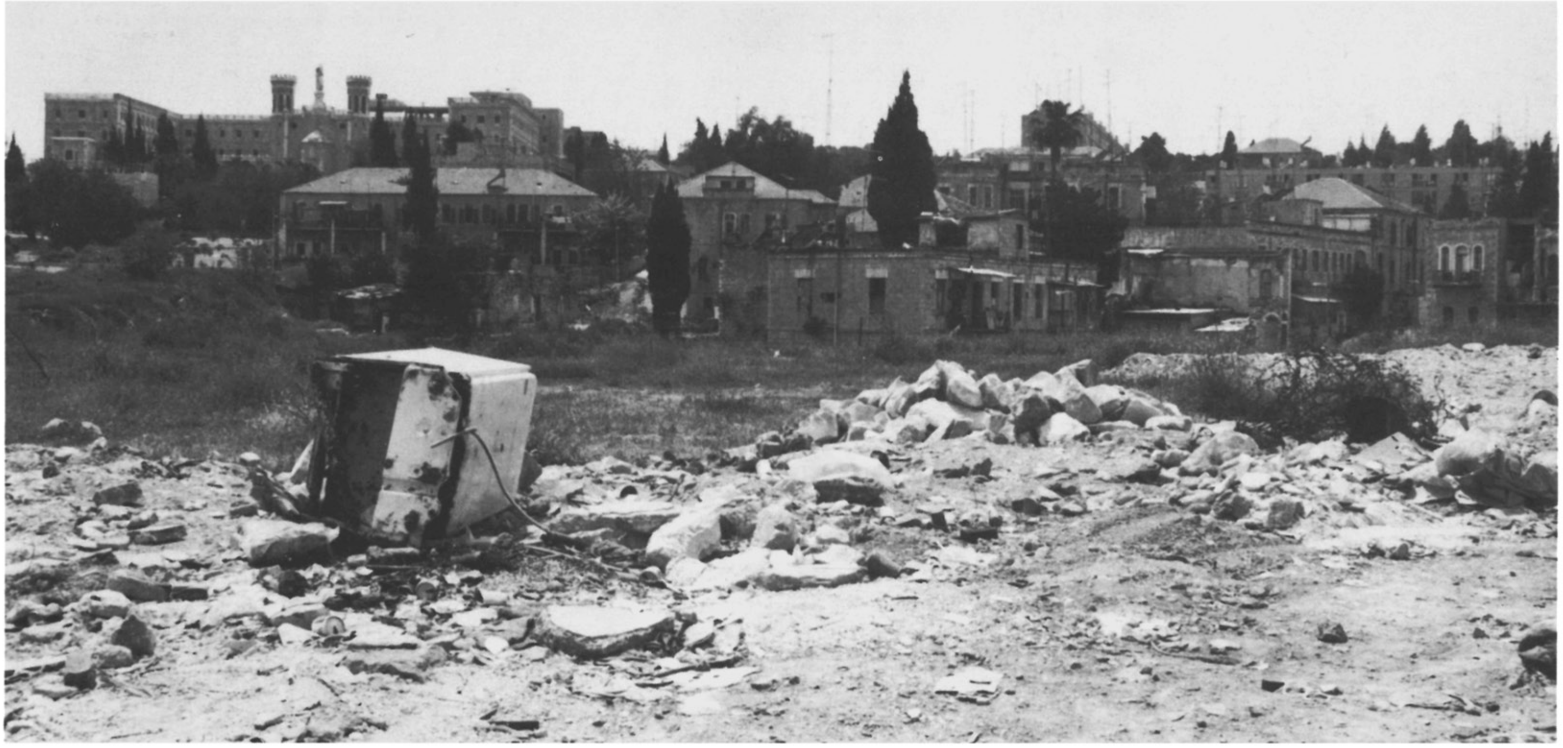

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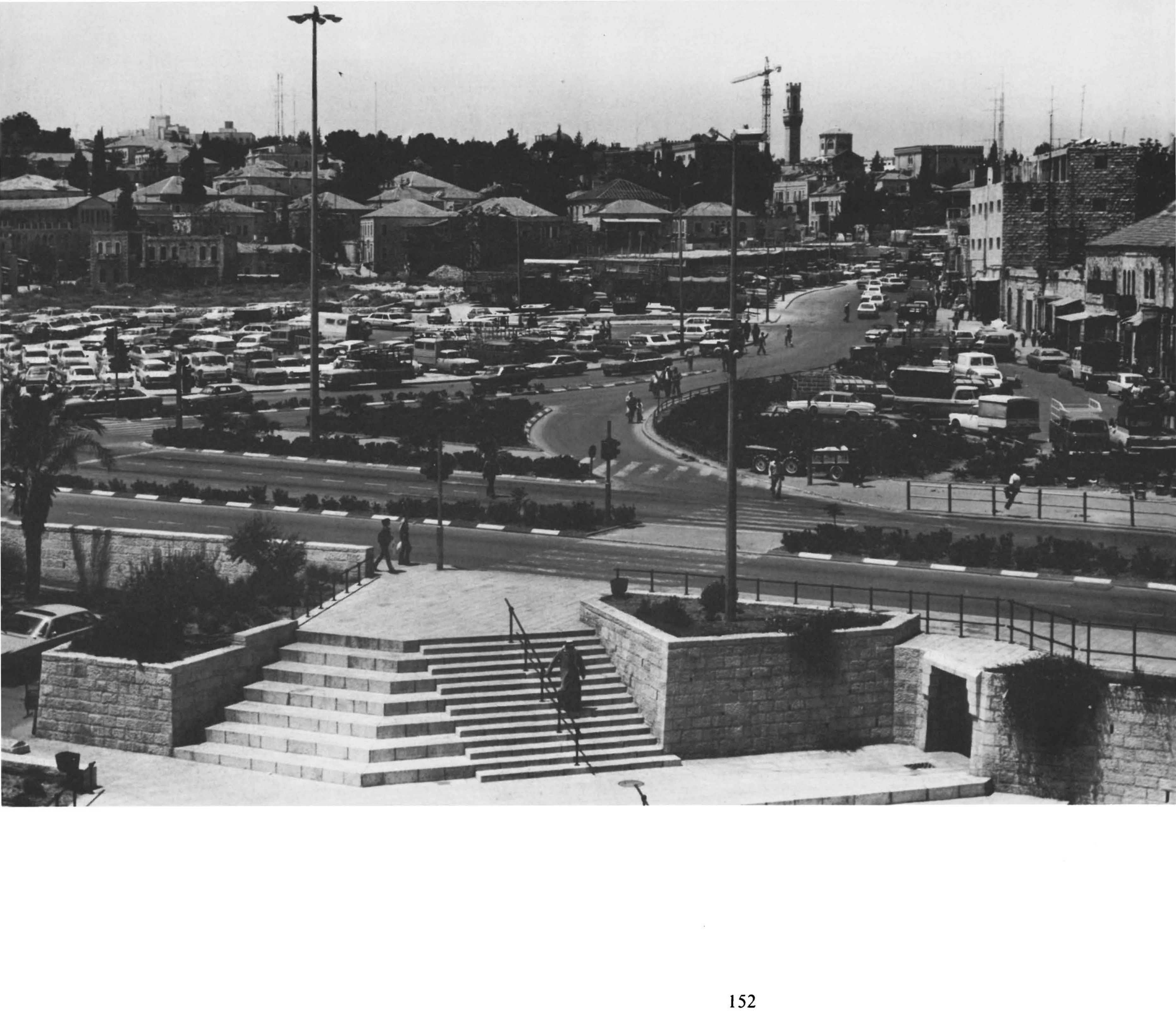

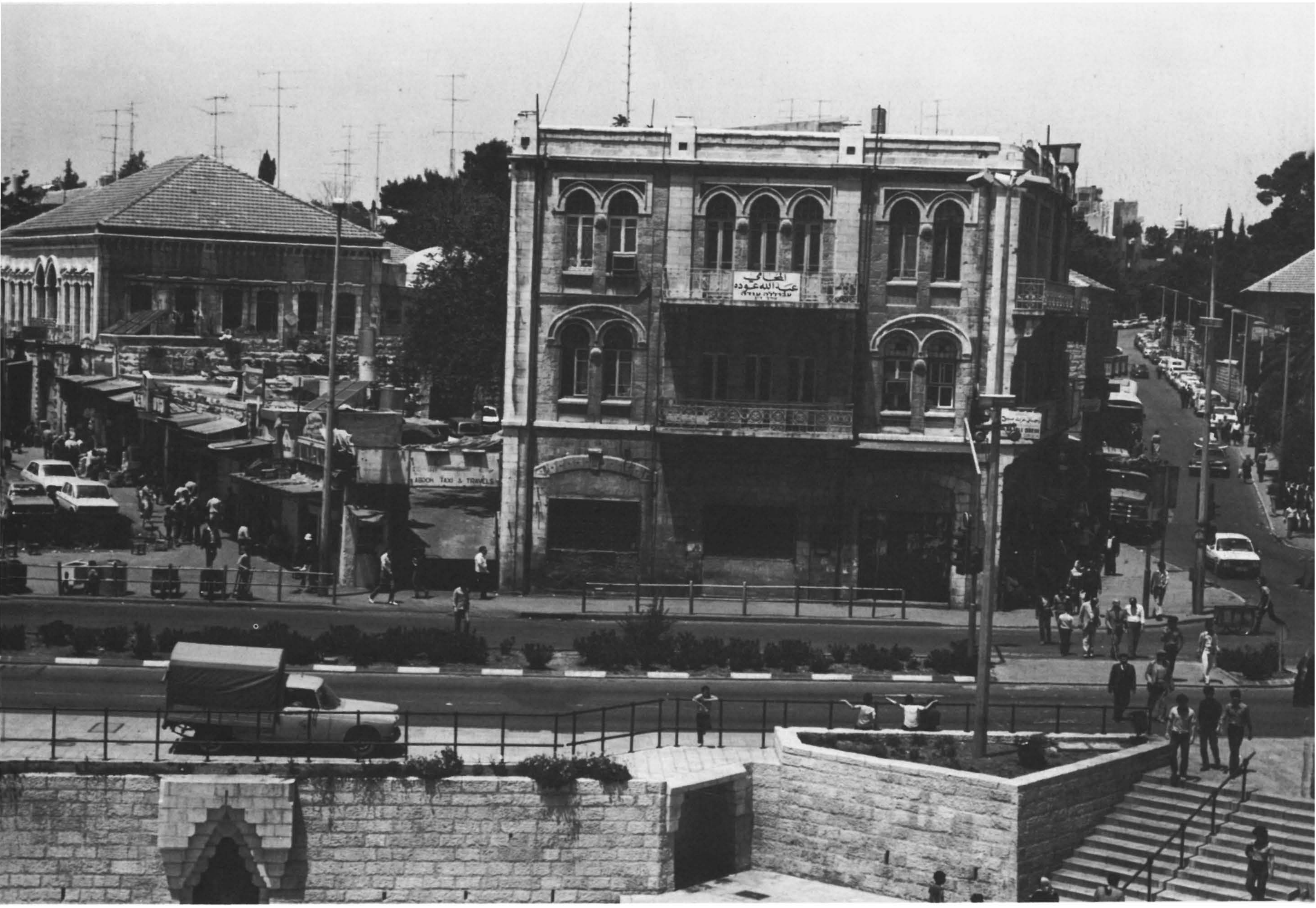

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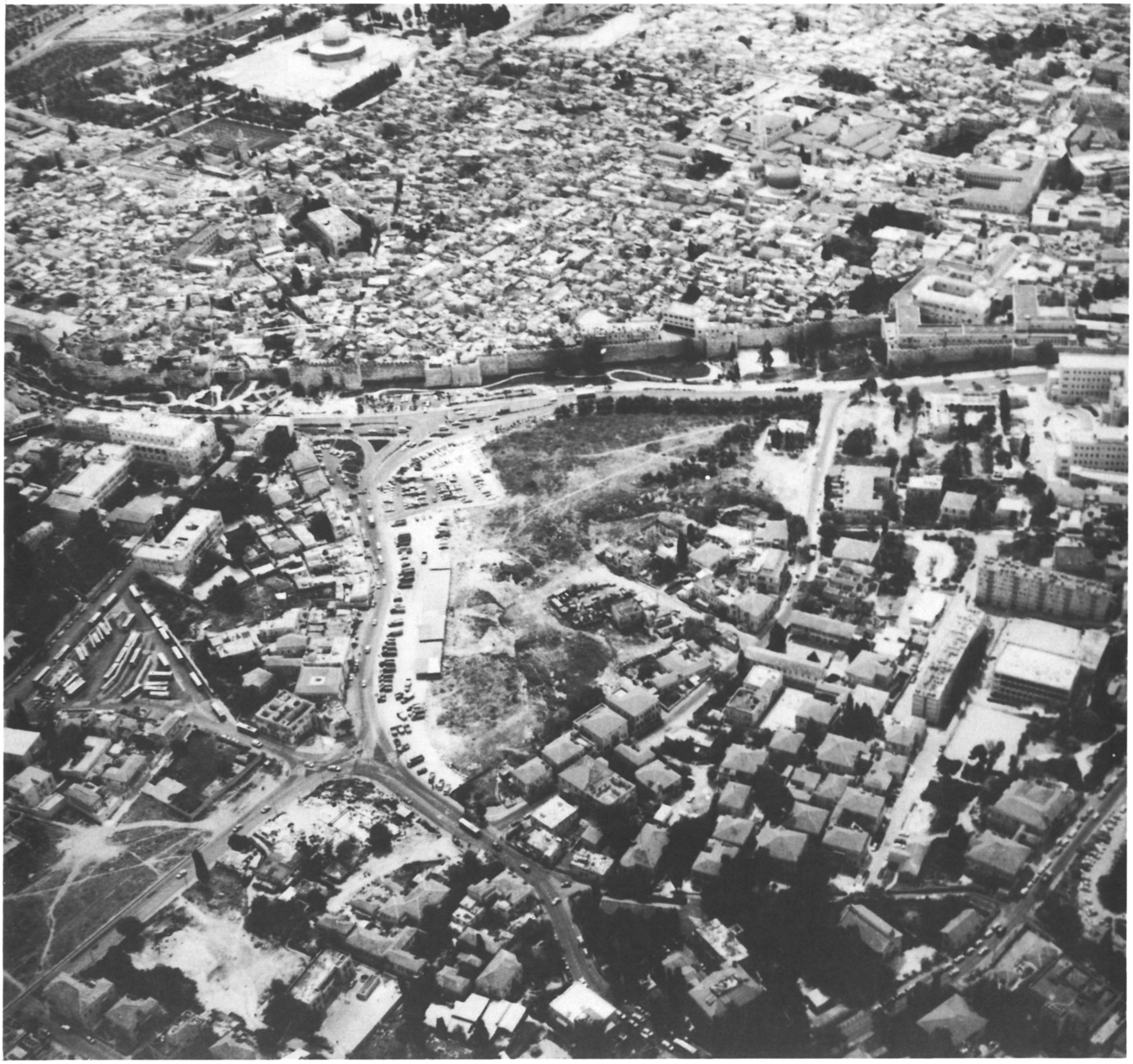
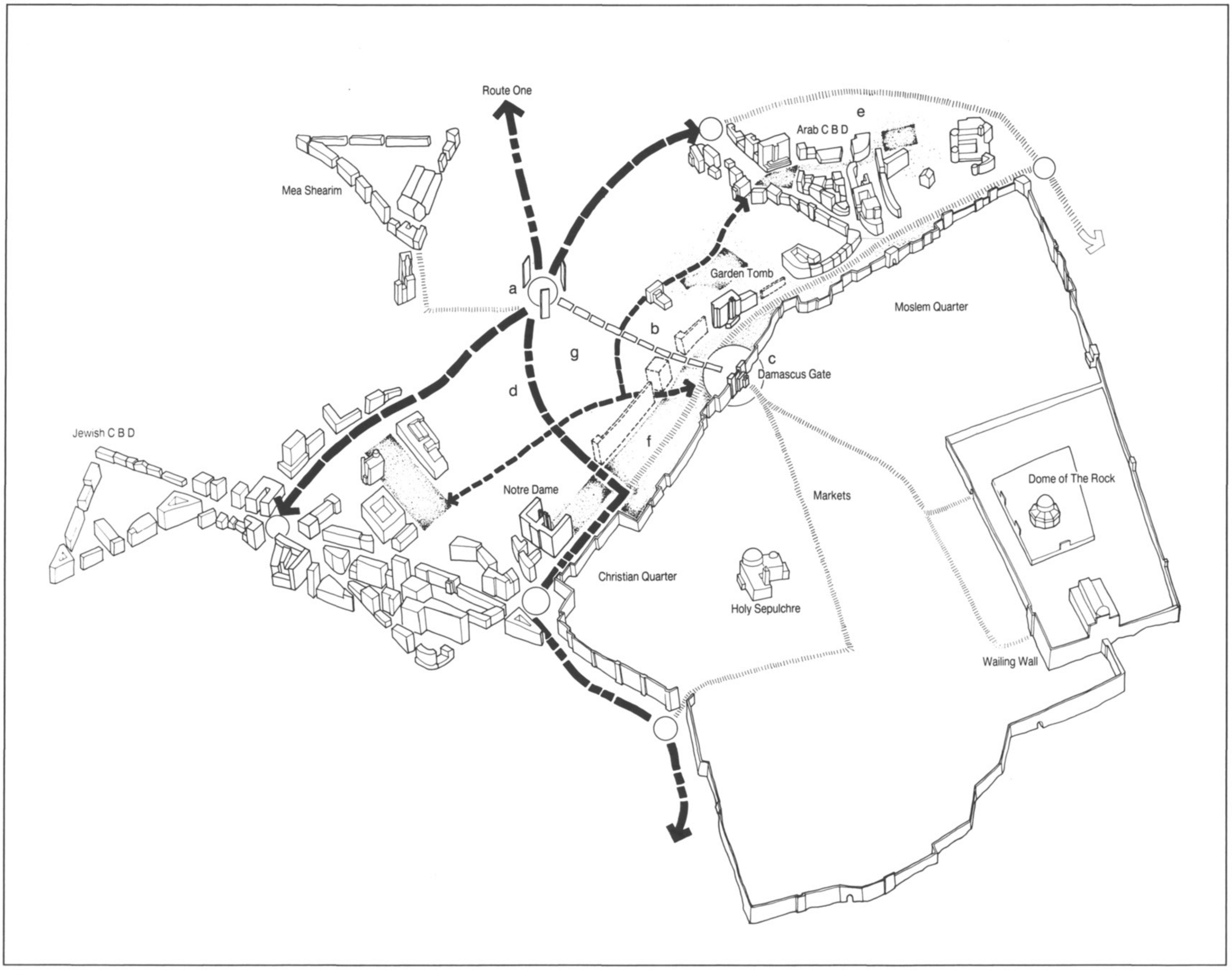


**3.16** *Aerial view of Damascus Gate area from the north. The Old City at the top. On the right the Sepharadic neighborhood of Morasha (Musrarah) and the Notre-Dame de France Hôtel. On the left is the edge of the Arab business district. The vacant triangle of land in the center was a no-man's-land between Jordan and Israel from 1948 to 1967.*

**3.17** *Site analysis diagram: a. intersection of Ha Nevi'im Street and Route 1; b. workshops and retail along Ha Nevi'im Street; c. Damascus Gate; d. development pressure from the neighborhood of Musrarah; e. Arab central business district; f. park in front of the wall, which is part of the green belt around the Old City; g. vacant triangle.*

**3.17**



## THE SPATIAL COMPONENTS

Although more than twenty schemes were developed for the Damascus Gate area in the course of the two-year period, the proposals fit into a limited number of schemes in terms of their organizational framework and program. The most common scheme was that of a principal street or boulevard forming a spine for development in the area. Generally the street commenced at the gate, extended north, and culminated in a public space or significant structure. Within this general arrangement there were streets of diverse character, with various focal points at the terminus.

Another recurring scheme was that of a covered street — variations on the theme of a bazaar. These generally formed a structure with a powerful presence on the site. Some of the covered-street schemes were oriented north–south, focusing on the gate; others commenced at the gate and extended west or northwest toward Musrara and the Russian compound.

Other proposals centered around a large public square, a relatively unfamiliar scheme for Jerusalem. Several designs were developed in which a piazza measuring as much as 90 by 170 meters became the focal point for community life. The square became the framework around which hotels, bus stations, loading and unloading activities, and shops were clustered. Some proposals were for formal spaces; others were somewhat informal. They constituted a new element in the repertoire of existing public spaces in Jerusalem.

A more conventional approach was to treat the triangle as an extension of the city's street pattern by creating a system of primary and secondary streets forming city blocks and fitting into it a mosaic of various activities such as one might find in the downtown area. An unusual scheme was to treat the site primarily as open space. Within the park, bus stations and other facilities were incorporated in an inconspicuous manner.

Finally, there were schemes that exploited the three-dimensional character of the topography and the several historic levels on the site: the lower Roman gate level, the present gate level, and the level of the existing streets above. Several designs proposed a subterranean system of paths relating back to the Roman levels, sunken below the present topography.

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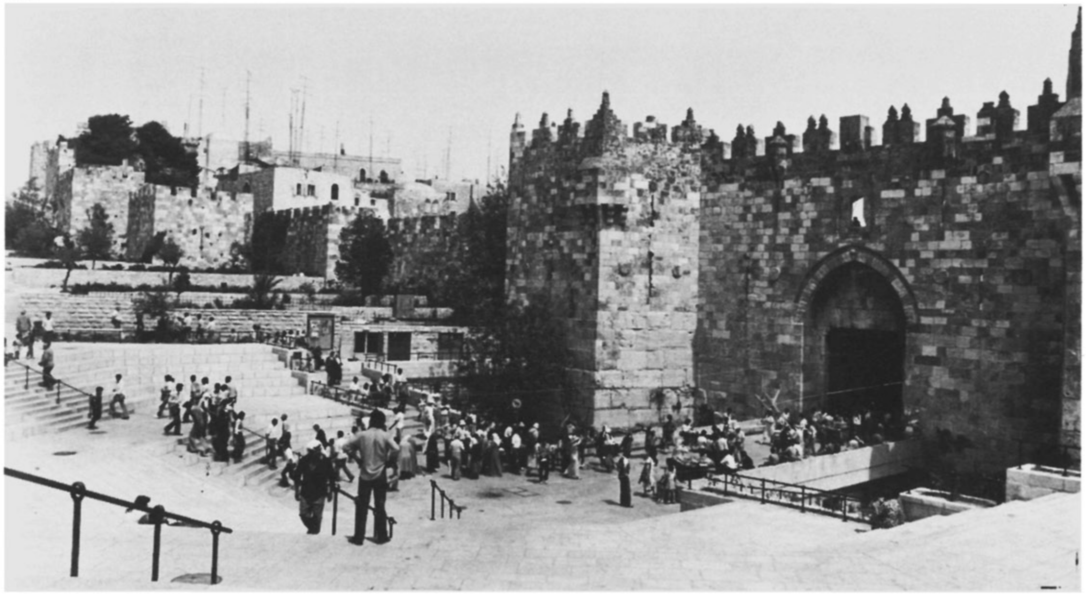

**3.18** *The recently constructed amphitheater in front of the gate bridge, the gate level, and Hazanhanim Street.*

**3.19** *Alternative design concepts: a. open space; b. public square; c. street; d. covered street; e. extension of patterns; f. underground street.*

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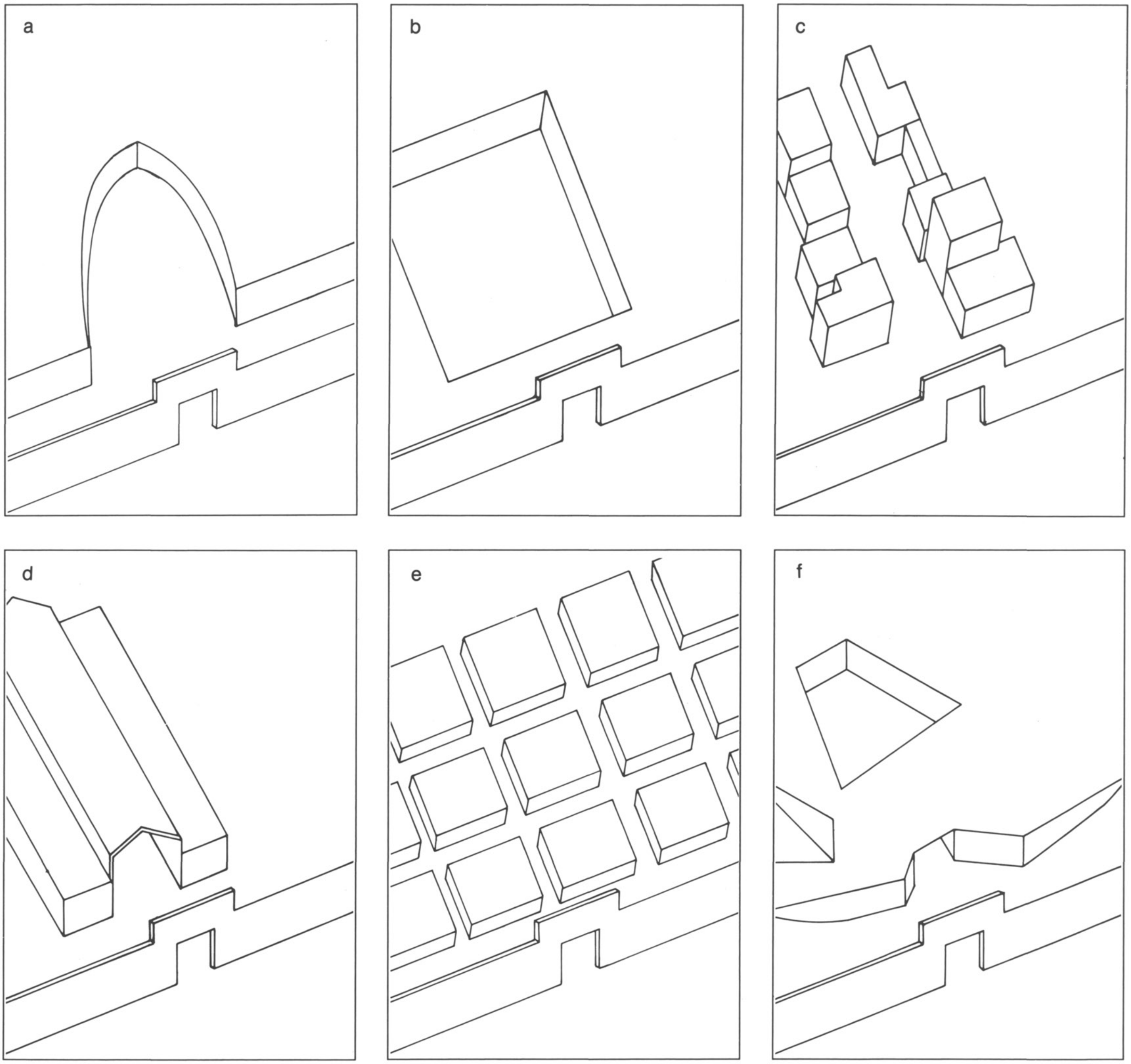

### *A City in a Park*

The proposal by Gene Dyer, Elyse Parker, and James Wong, working with Safdie, Krauss, and Lane, was dominated by one central idea: that the vacant lands in front of Damascus Gate should become an urban park. Within this park would be inconspicuous transportation services and major public buildings. The uniqueness of the scheme was that it was the only one to attempt to give the area the image of a garden while minimizing the presence of commercial and institutional structures. The team proposed that the transportation services and three major international institutions be partially camouflaged and buried in the landscaped terrain.

The concept was based on the convictions that open land in the center of Jerusalem is a precious commodity and that the sentiments of the Jerusalem public in wanting a park in the area ought to be respected. Recognizing that institutions are closely linked to issues of territoriality (depending on whose institutions they are), the team proposed that the three structures on the site accommodate international institutions, thereby transcending the political differences of the city's population. They proposed the creation of an Institute for Peace, an Institute and Museum of the History of Jerusalem, and an Institute for Religion (U.S.), which were to be established by international organizations and represent a world constituency. They would celebrate, at the heart of the city, Jerusalem's international significance.

This proposal had something of the quality of a woven tapestry. The warp was formed by a network of landscaped terraces and stone retaining walls accommodating the change in topography, with orchards recalling a somewhat agrarian biblical quality. The overlay pattern was formed by the principal road system, which, through a clever manipulation of levels, separated vehicular and pedestrian traffic at the gate without resorting to long stretches of an underground tunnel.

The proposal exploited the presence of the ancient Roman gate on a level below the present Ottoman gate by placing a pedestrian crossing under the highway and through the lower gate. A cluster of shops extending out of the gate toward the bus station lined this passage. The transportation facilities were brought close to the gate and accommodated in a top-lit series of underground platforms. Buses entered the station through a ramp coming from Route 1 at the northern extremity of the site. For convenience, the drop-off and loading points were brought very close to the gate. To achieve this, the proposal resorted to a multi-level, below-grade terminal that would require a higher level of capital investment.

The three institutions were ingeniously sited; their presence was dramatic, while their bulk was minimized. Parts of their facilities were literally buried in the landscape and lit through sunken courtyards, not unlike the underground village dug into the leuss soil in the Xian region of China. Other parts were integrated into landscaped terraces, creating an ambiguity between garden walls and building edge. Public rooms were then allowed to erupt almost like outcroppings into the landscape, marking the location of the buildings and giving them presence as pavilions in the park.

Everyone assessing the proposal was moved by the compelling quality of the landscaped terrain, into which many facilities had been integrated. The rejection of the obvious reliance on commercial and other day-to-day activities in favor of special uses was provocative and precipitated a discussion as to what indeed were the most appropriate uses for this site. Some felt that the program was naive: three international institutions were unlikely to be established

**3.20** *The various institutions and open space are overlaid to constitute a huge terrace garden. Site plan showing: a. series of landscaped terraces; b. international conference center; c. archaeological museum; and d. library and housing for scholars. Underneath the terraces are a bus terminal, parking structures, and a truck depot (Dyer, Parker, Wong).*

in Jerusalem. If the search for international entities of this kind failed, it was feared that more parochial institutions were likely to be established on the site, which could alienate part of the population. Others felt that the proposal to locate institutions on the site was secondary to the central concept demonstrating that an urban park could accommodate public facilities and services in a manner in which the landscape image prevailed.

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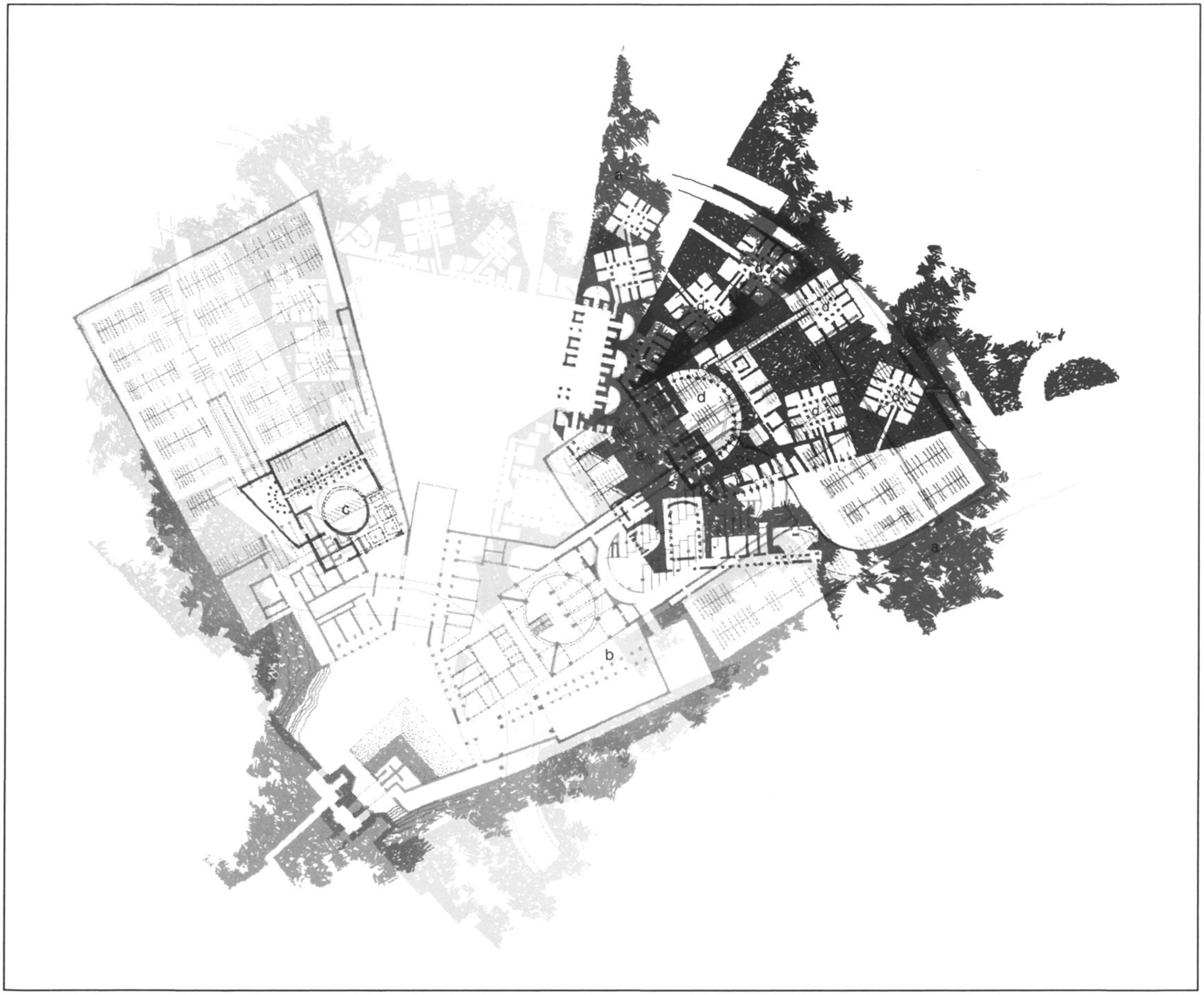

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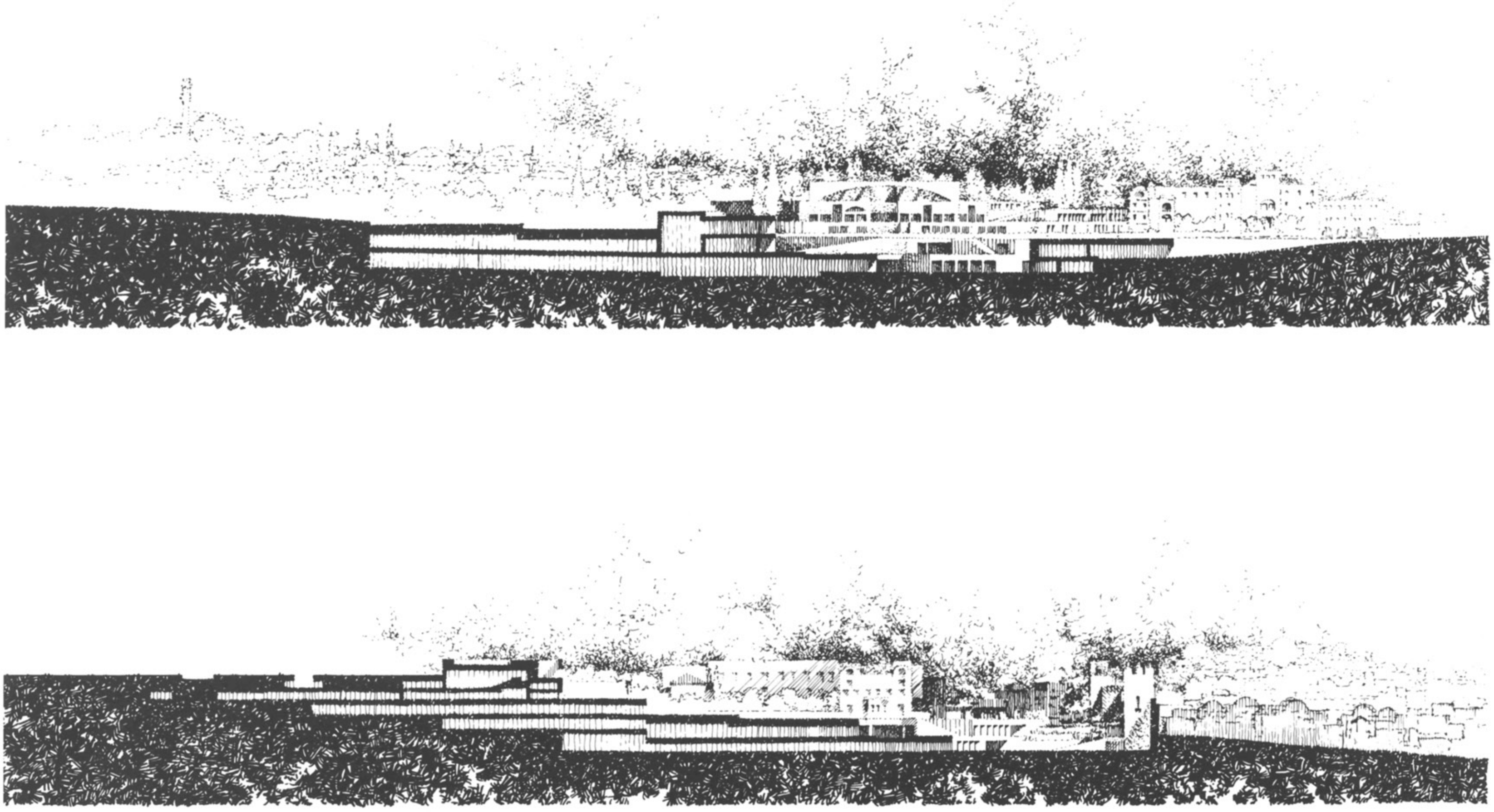

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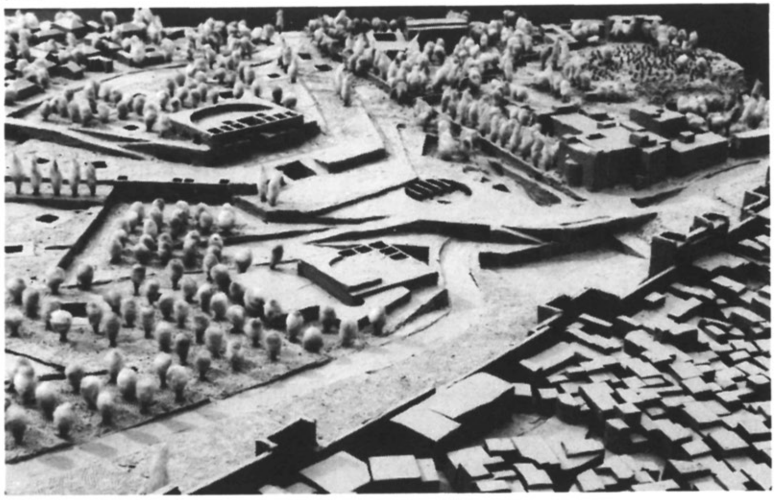

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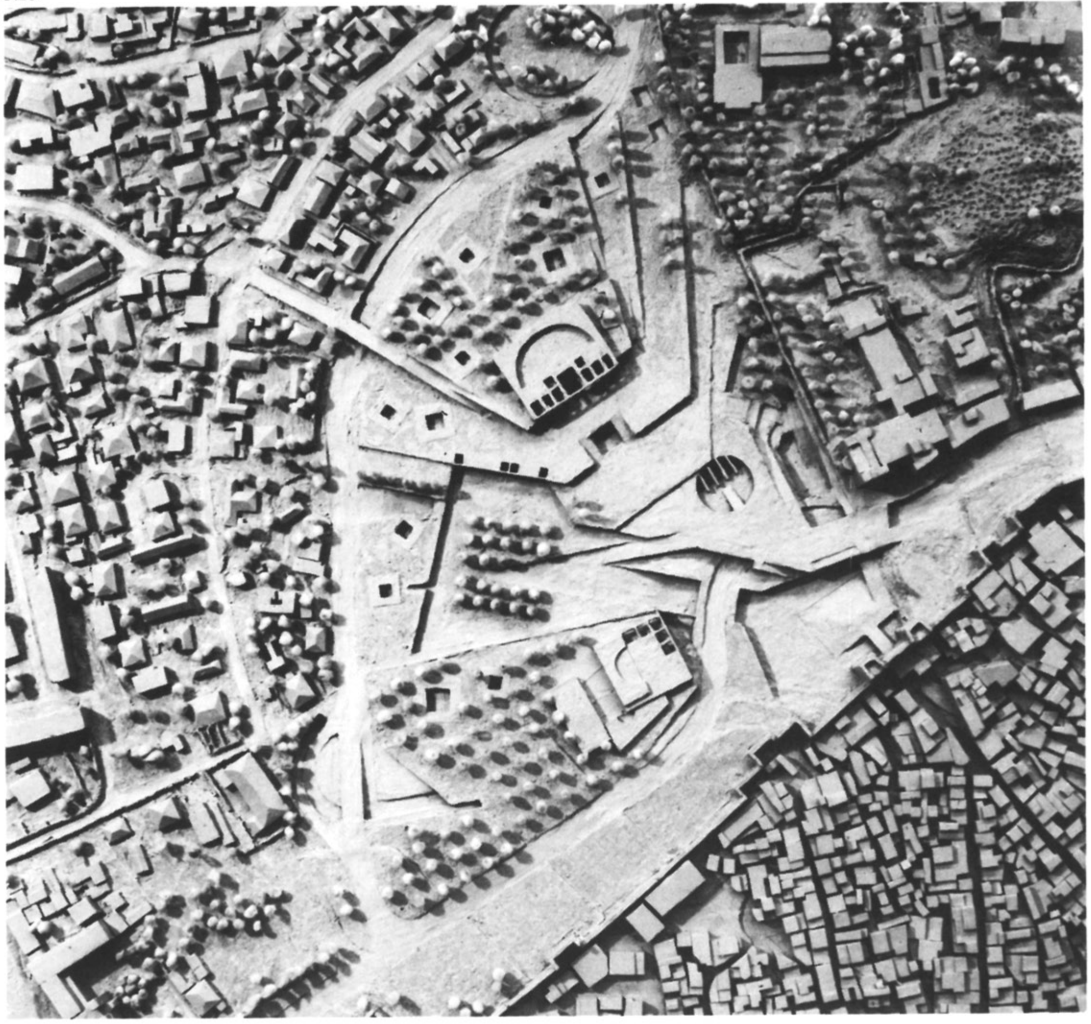


**3.21** *Sections through conference center (Dyer, Parker, Wong).*

**3.22** *Model, view looking north from above the Old City. Hazanhamin Street bypasses the gate area underneath one of the garden terraces (Dyer, Parker, Wong).*

**3.23** *Model of the project showing the conference center atop the terraced garden (Dyer, Parker, Wong).*

### *The Great Wall*

Steve Johnson and Cameron Roberts, working with Koetter and Safdie, proposed a scheme centered on an architectural tour de force: a single continuous building, eight hundred feet long, forming a colonnaded street roofed by several levels of commercial activity. The structure commenced at the city wall at the gate, ran perpendicular to it and headed to a proposed piazza and bus terminal. The singular building could be interpreted as either a street-building or a "wall-building," depending on one's perspective. As a street-building, it connected two destinations: the gate and the terminal. Two levels were open to public circulation and accommodated shops on both sides. Above, supported by the colonnade, was a hotel and a public promenade that descended as it reached Damascus Gate. The powerful structure gave the cue to the character of the square at its northern end, with the bus station forming the principal facade of the piazza. A terraced park stretched parallel to the building to the west, following the natural contours northward from the gate toward Musrara.

In order to locate the linear building directly opposite the gate, Johnson and Roberts proposed demolishing the sector of existing buildings standing between the Street of the Prophets and Nablus Road. They concluded that these buildings were of dubious commercial or architectural value and that the gate demanded a powerful counterpoint extending into the new city fabric. The facade forming the end (or beginning) of the linear structure facing Damascus Gate was that of a "counter" gate.

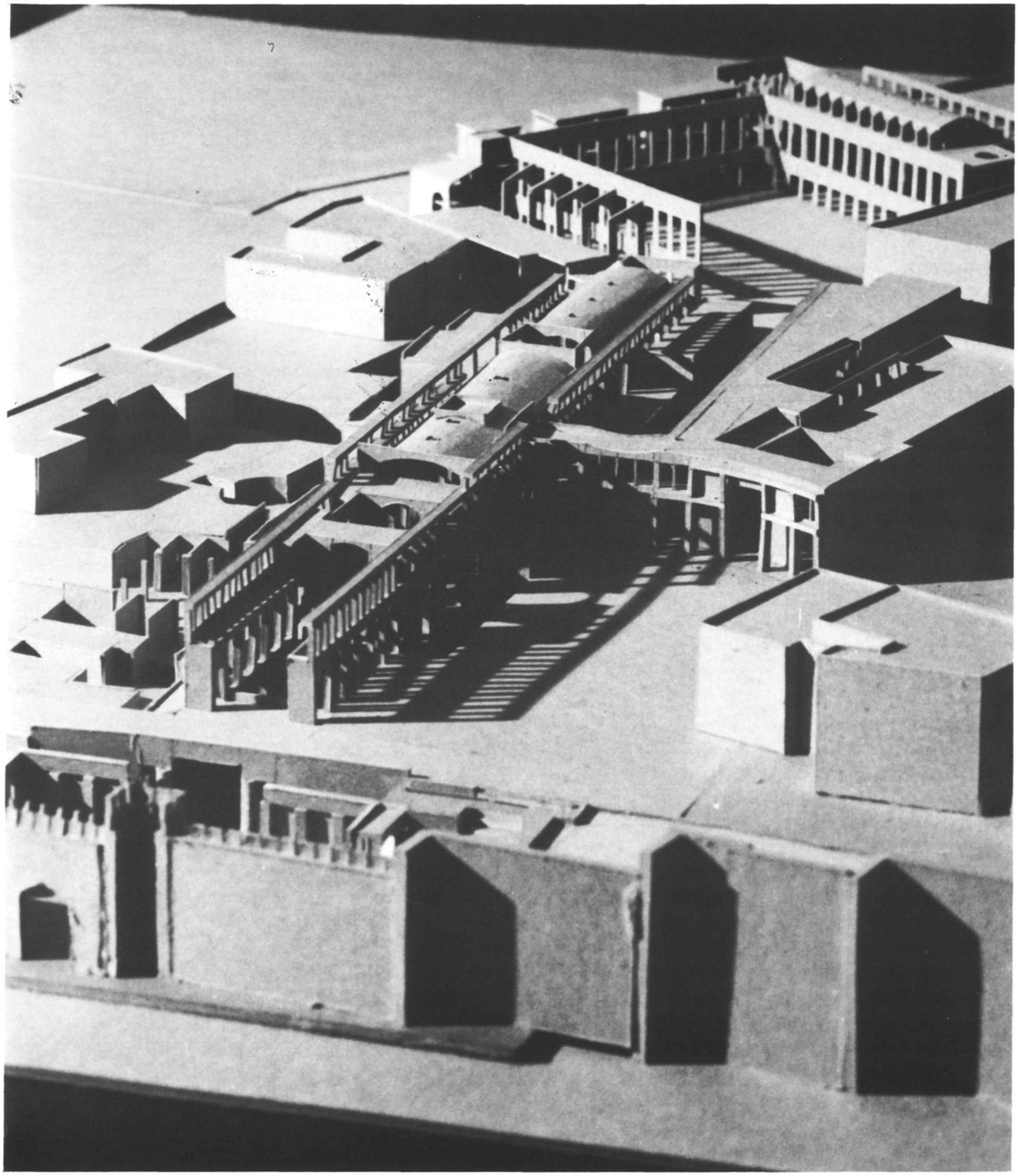
The north–south orientation of the building meant that it gave no preference to either east or west — that is, to either the Arab or Israeli sector of town. Instead, it focused on the transportation facility, which would serve the entire population. Its location meant that considerable land was left to the west, thus facilitating a gradual park-like transition into Musrara. New housing that would extend the Musrara neighborhood into the site was also proposed.

The scheme was appreciated for its powerful imagery and architectural qualities, which created a strong symbolic connection between the Old City and the new city — one that departed from the conventional vocabulary of the architecture of Jerusalem and made an affirmative statement about connecting past and present. Some felt that the intervention was too harsh — that a single structure in the hands of a single designer stretching three hundred meters in Jerusalem's landscape was a foreign element in the sociocultural heritage of the city; that it was inappropriate in the manner in which past and present were related; that the architecture was not pluralistic enough, accommodating enough, soft enough to resonate the old (precisely the reasons for which the supporters of the project endorsed it.)

The north–south orientation of the structure evoked discussion about its symbolic interpretation. To the west is vacant land, beyond which is Musrara. To the east are the Muslim cemetery and the Garden Tomb and, beyond that, the Arab central business district. Would the building, running on the edge between the Israeli and Arab communities, come to be thought of as a wall, a separator, a barrier between them? Or would it become a meeting point, nourished from east and west, a new center of activities? Alternatively, would it become a "porch," the edge of the Arab community, fronting the Israeli side, a borderline between communities? The subtlety and fragility of any dramatic physical gesture became apparent as one critic after another came to contradictory conclusions about the impact of this scheme on the life of the city.

**3.24** *Model, view looking north over city walls with Damascus Gate in lower left (S. Johnson, Roberts).*

**3.24**



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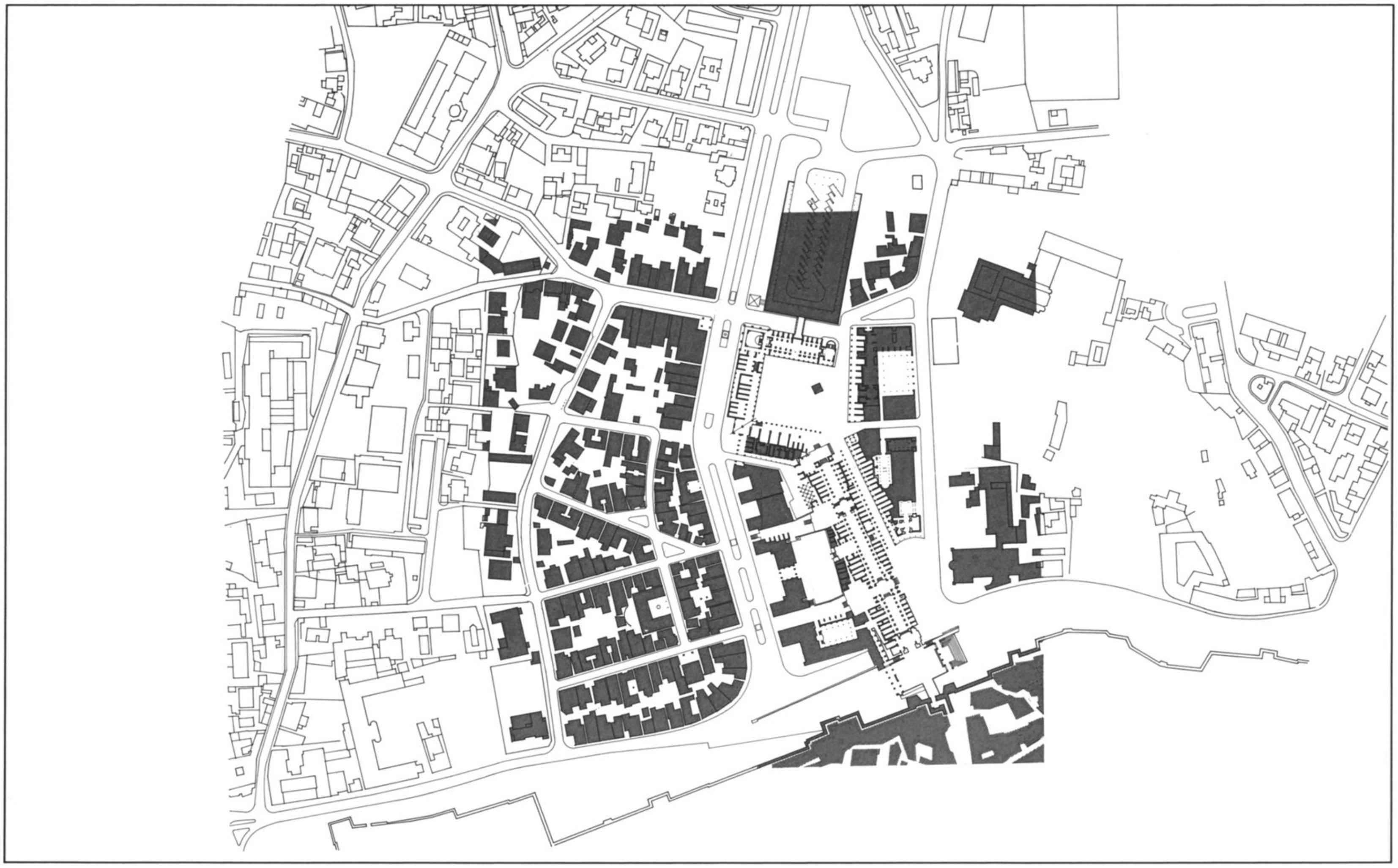

**3.25** *"Nolli Plan" of the proposal and its environment (S. Johnson, Roberts).*

**3.26** *Perspective view of street or "bridge" as seen from Damascus Gate plaza. It is designed to channel pedestrian flow between Damascus Gate and the bus terminal (S. Johnson, Roberts).*

**3.27** *Site plan showing: a. pedestrian street; b. plaza; c. bus terminal; d. truck depot; and e. housing (S. Johnson, Roberts).*

**3.28** *Detail of "bridge" — the pedestrian street (S. Johnson, Roberts).*

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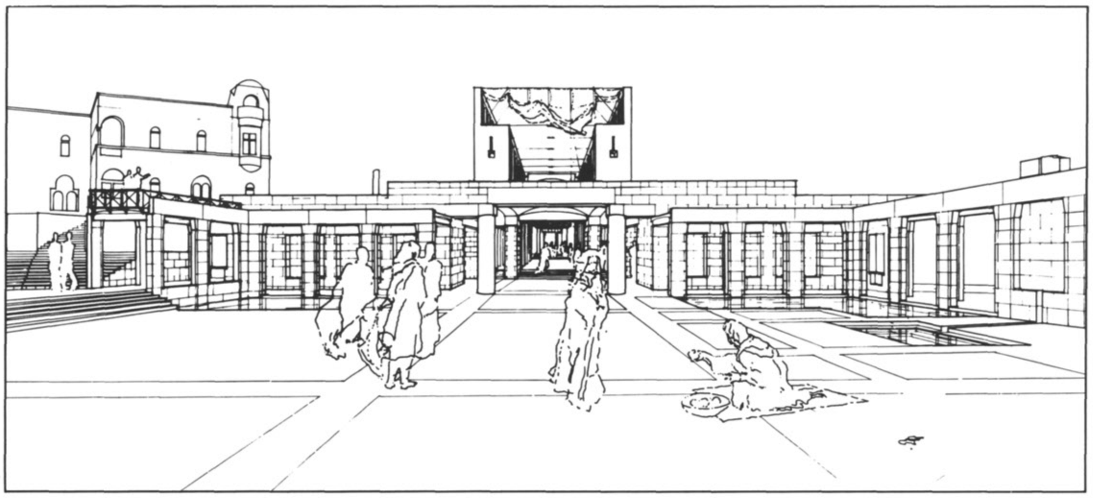

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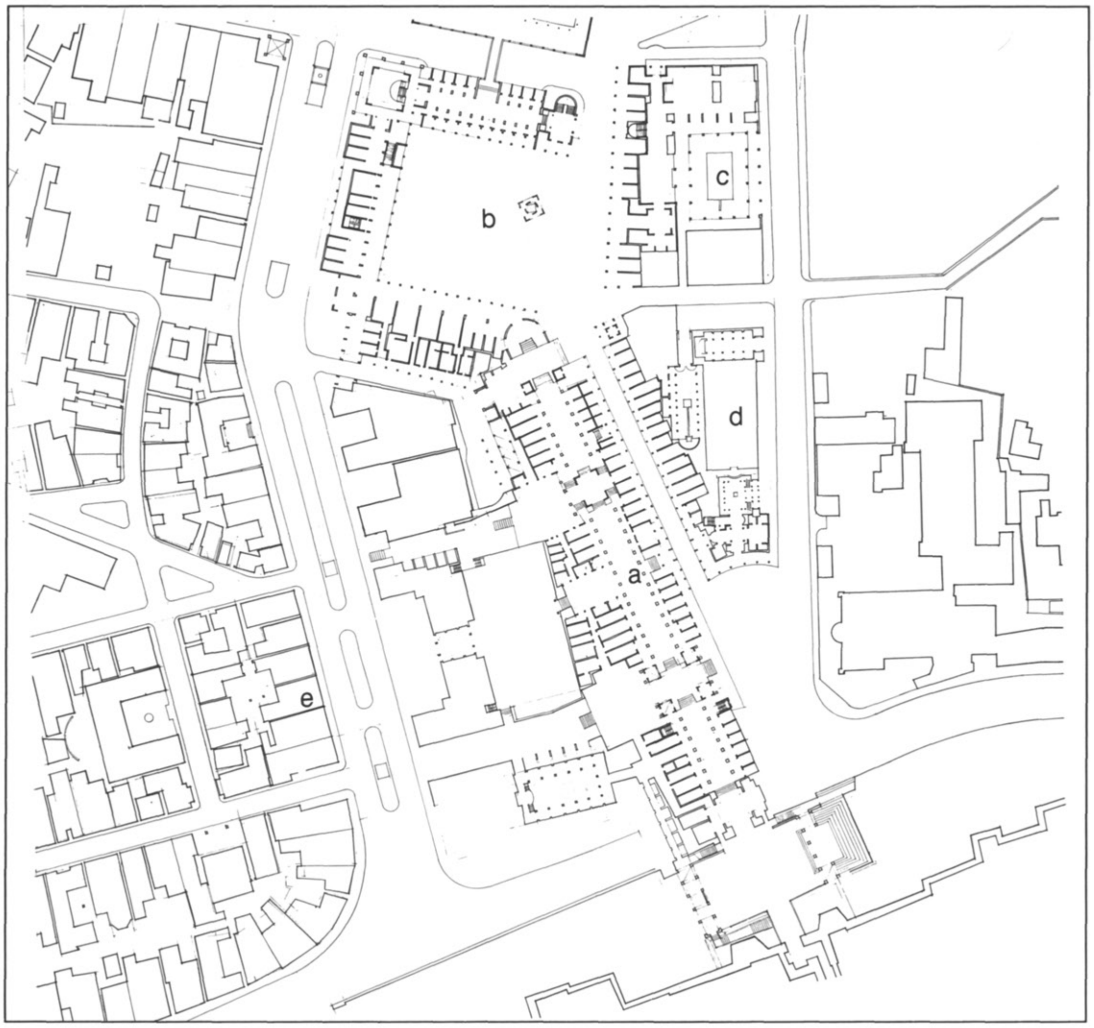

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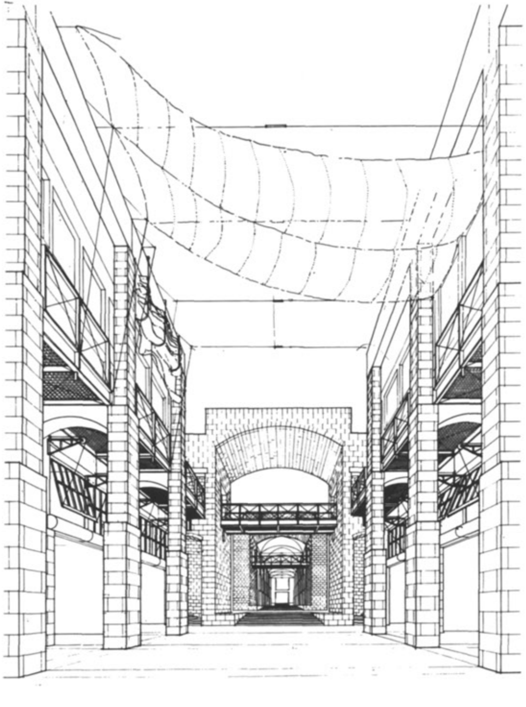

## *The Grand Square*

Kawasjee Rustom and Margarita de la Iglesia, working with Koetter and Safdie, proposed a grand square. While under the sleepy dominion of the Ottomans for four centuries, with the resulting cultural and economic stagnation, Jerusalem missed out on the urban developments of the eighteenth and nineteenth centuries that transformed European cities. The students wondered why this Mediterranean city did not have any of the squares and piazzas so commonplace in Italy and Spain, places of comparable climate and history. Jerusalem did not have a Piazza Navona, a Piazza d'Espagna, a Piazza alla Sienne, nor even little piazzettas. The only architecturally defined grand space was the Temple Mount, contained by the Mameluke arcades on the west and north and by the city wall and the Al Aqsa mosque on the east and south.

Kawasjee and Iglesia wanted to rectify the historical omission by constructing in front of the gate a grand square measuring about 100 by 300 meters. The square was conceived as the center for activities and the framework for buildings that would "plug" into it from all directions. Workshops, a trucking terminal, and makeshift markets would contain the eastern edge of the square, a bus terminal the northern, and hotels and residential facilities the western. A public hall to the south would form the transition between the square and Damascus Gate. A colonnade built with public funds would define the edge of the square. Individual buildings located behind the colonnade would form a diverse skyline.

The square would be large enough to allow for diverse activities. Parts would be paved and open, allowing trucks to unload and temporary markets to be set up — a place for organized messiness. Other parts of the square adjacent to the hotels would be elaborately landscaped. Terraces in front of the colonnade would accommodate restaurants so that they could benefit from sunlight in winter and recede into the shaded shelter of the colonnade in the hot summer. Thus, not unlike the great Maidan in Isfahan, on which the proposal was modeled, the square would form within it many activity zones.

Kawasjee and Iglesia were not the only team to propose grand spaces; four other teams concluded that a public piazza would be the most appropriate way to accommodate public life in that part of Jerusalem. The predominance of this idea generated debate. On the affirmative side was the argument that such spaces, when carefully designed, would be effective settings for public life. What Jerusalem needs is a place to amplify public activity and interaction, and the square does this more effectively than the *suk* or the linear public space. The square becomes the connector, the bridge between communities where tourists and residents, Arabs and Israelis all unconsciously interact.

Some details in the proposal were questioned. Was the square optimally located? Did not its siting toward the east entail excessive demolition of existing buildings? Was there not the danger that the proposed size overlooked the unique climate of Jerusalem and would result in a place too dusty and stark, baking in the heat through the summer? The most controversial aspect of the proposal was the relationship of the square to Damascus Gate. Some felt that the gate was the primary focus of that sector of the city, a landmark that could not be ignored and one that must remain pivotal to the experience of the public space created in the area. It was felt that the proposal had unacceptably separated the gate and the square. When in the square, one would have no sense of the location of the gate, and conversely, coming out of the gate, one would have no sense of the presence of the square.

There was no consensus on the question of the appropriate size of the piazza and the design of its periphery. It was recognized that if diversity of individual buildings were to be

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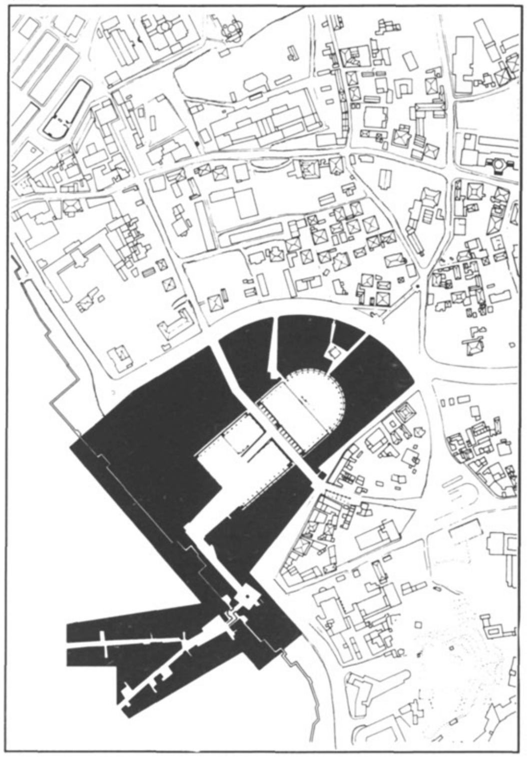

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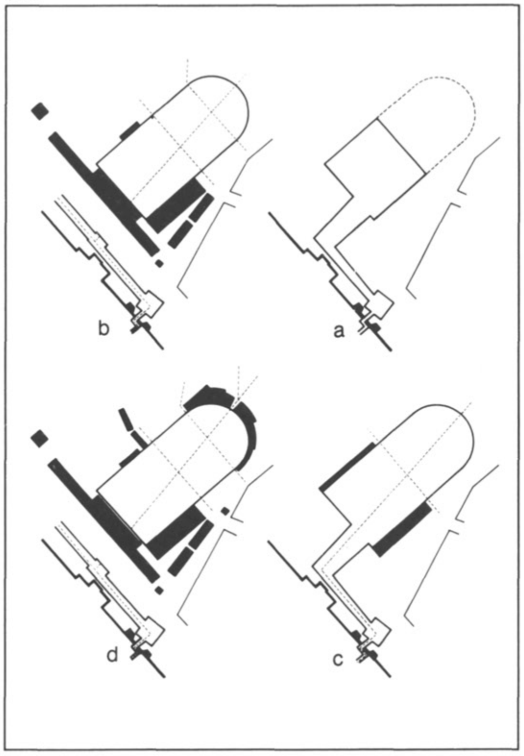

**3.29** *Diagram of open-space system (Gordon, Leprette).*

**3.30** *Conceptual phasing studies (Gordon, Leprette).*

**3.31** *Model, view looking north from the Old City, with Damascus Gate in lower right. The vast plaza is divided at the center by a viaduct, which creates two levels connected by a ramp perpendicular to the wall (Gordon, Leprette).*

permitted, some unifying element was required. The publicly constructed colonnade would achieve this, but it required heavy capital investment. The alternative was to impose urban design guidelines on the individual buildings, thus creating continuity.[1]

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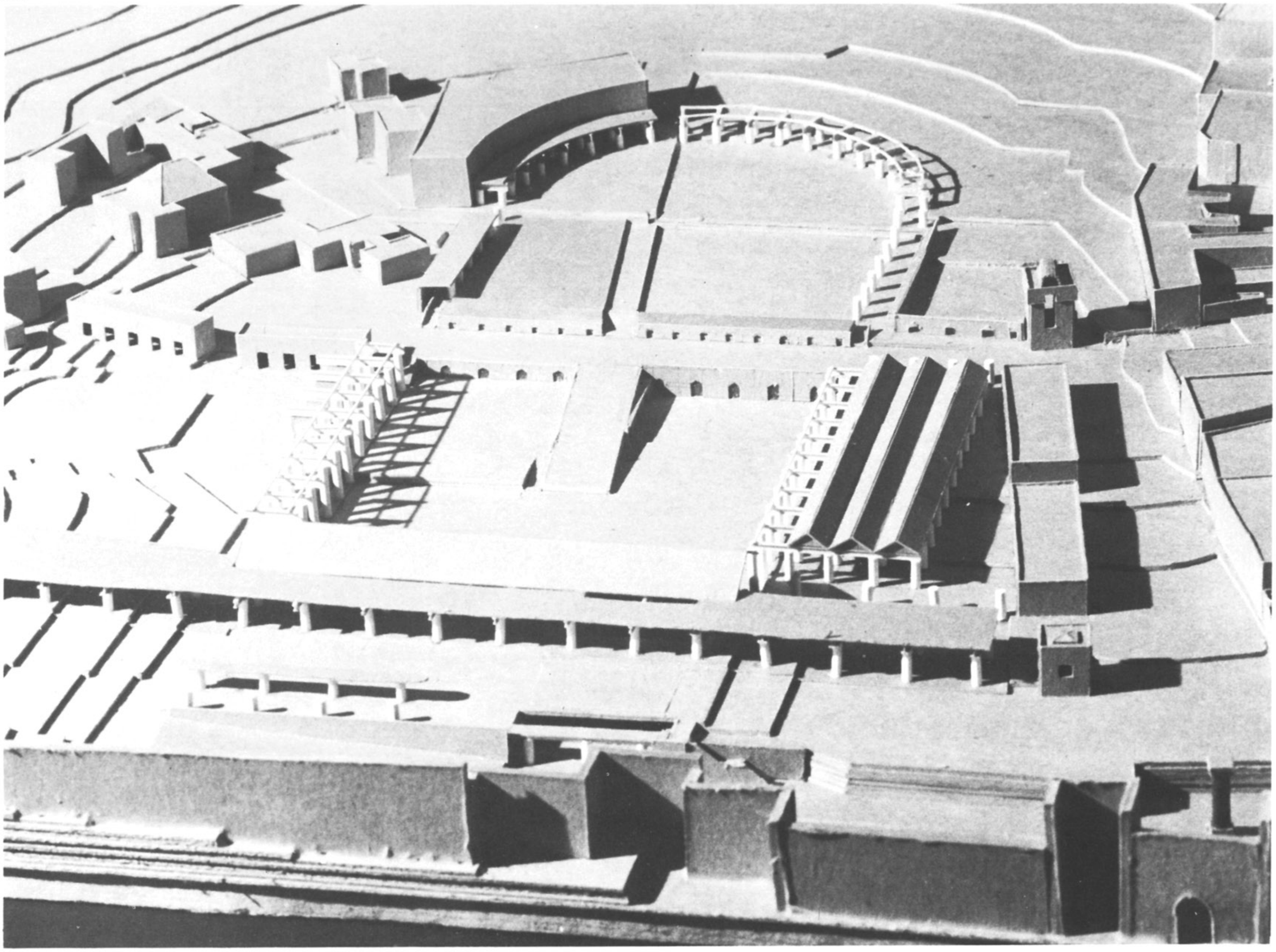

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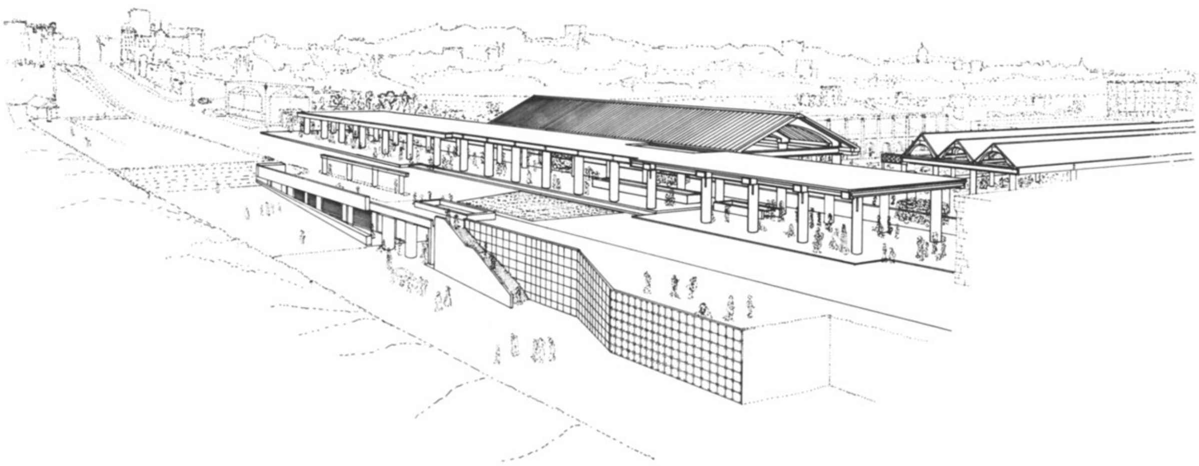

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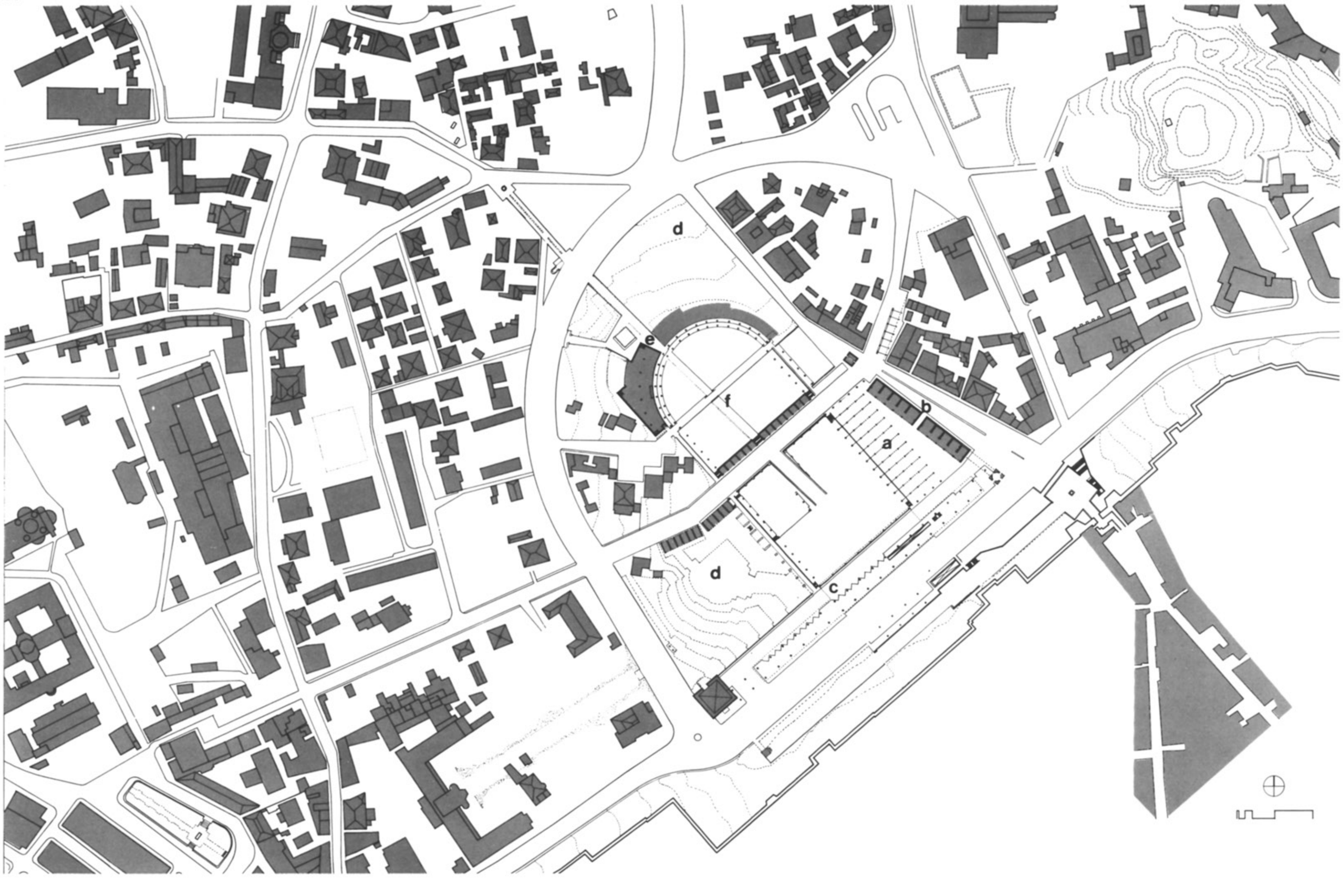

### *The Bazaar and the Walled Garden*

The bazaar (or *suk*) and the walled garden are ancient and traditional urban forms in the Middle East. Both elements became the basis of a proposal by Uri Shetrit and James Smith, who set as an objective the creation of effective connectors to the parts of the city fronting the triangle. The main element, a two-story galleria, would extend northwest from Damascus Gate to a small piazza contained by two-story buildings. To the north, a terraced urban garden would be flanked by buildings, leading to a bus terminal at the northern extremity of the triangle. Route 1 would loop through the terminal. The existing buildings east of the Street of the Prophets would be preserved and the street aligned with new buildings on its west side, containing the street and making it into a service mall. Landscaping, improved sidewalks, and shops would extend this development along Suleiman Road toward the Arab central business district.

The Shetrit–Smith proposal embodied a number of unique features. Rather than bringing Route 1 directly into the site, they proposed curving it in an S formation, which would force traffic to slow down and create a transition as the road changes from an arterial into an urban boulevard. The loop section, running east–west at the center of the S, would contain the bus station, which would flank both sides, and form a landmark at the apex of the site. Shetrit and Smith believed that by orienting the bazaar in an east–west direction, the public activity would extend so as to connect the Arab and Israeli business districts.

The project was appreciated not only for the strong east–west connection and the inventive way of bringing Route 1 into the site, but also for the appropriateness of its detail and diverse experiences. Rather than relying on a single spatial experience, this project established several scales of development. The designers achieved easy transitions to the surrounding area by preserving and restoring the existing Arab buildings on the east side of the Street of the Prophets, by extending the Musrara neighborhood, and by bringing in and accommodating the pedestrian circulation from the Mea Shearim and other neighborhoods to the north.

Once more the questions of symbolic meaning were raised. Was the *suk*, with its formal gateway extending westward from Damascus Gate, to be interpreted (or misinterpreted) as giving preference to the western side of town? Was its location not an assertion that the principal extension of the Old City markets was westward toward the Russian compound, which underplayed the significance of the Arab central business district? The authors of the project insisted that by developing the streets and shops east of the gate, a balance of emphasis would be maintained, while others concluded that it clearly favored the western side.

As with many of the proposals, it was necessary to separate the basic idea from the details of its implementation. Although the bazaar was, by consensus, an indigenous and most appropriate form for Jerusalem, there was considerable discussion as to whether the details — circular concrete columns culminating in an elaborately detailed pitched roof — were not more like a nineteenth-century two-story European shopping arcade than the traditional *suk*. Would the form and details (and cost) of this two-story bazaar not cause it to become an expensive and fashionable shopping center rather than an indigenous market? And would this in turn not give preference to the more affluent Israelis and tourists over Arab buyers? Shetrit and Smith's response was to assert that life in Jerusalem is not static; fashionable shopping by Damascus Gate is an appropriate contemporary function that would serve all segments of the population.

3.32 *Perspective view looking northwest from the Old City walls toward the Russian compound (Gordon, Leprette).*

3.33 *Site plan showing: a. truck staging area; b. market stalls; c. bus station: d. park; e. hotel; and f. underground concourse (Gordon, Leprette).*

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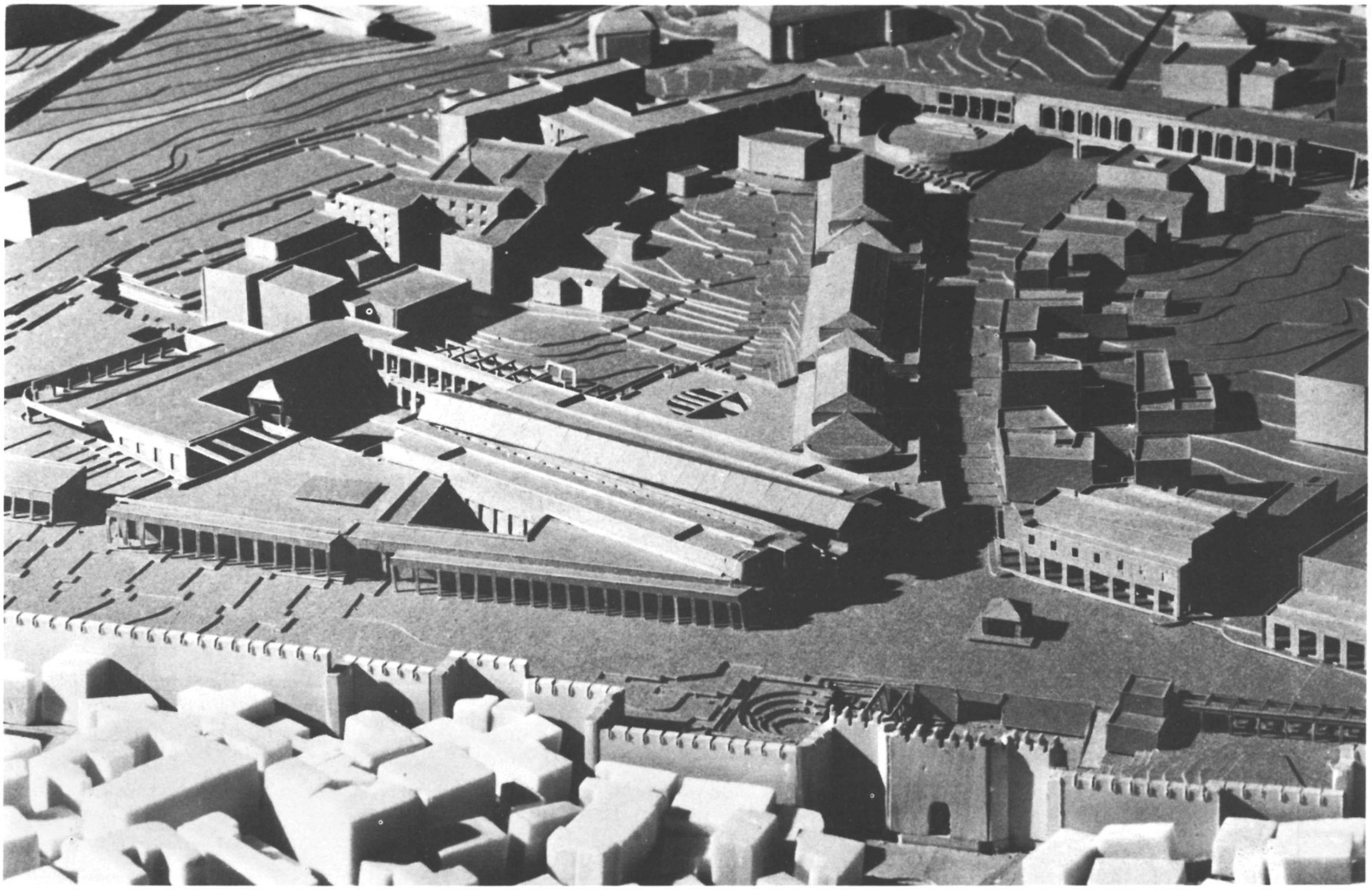

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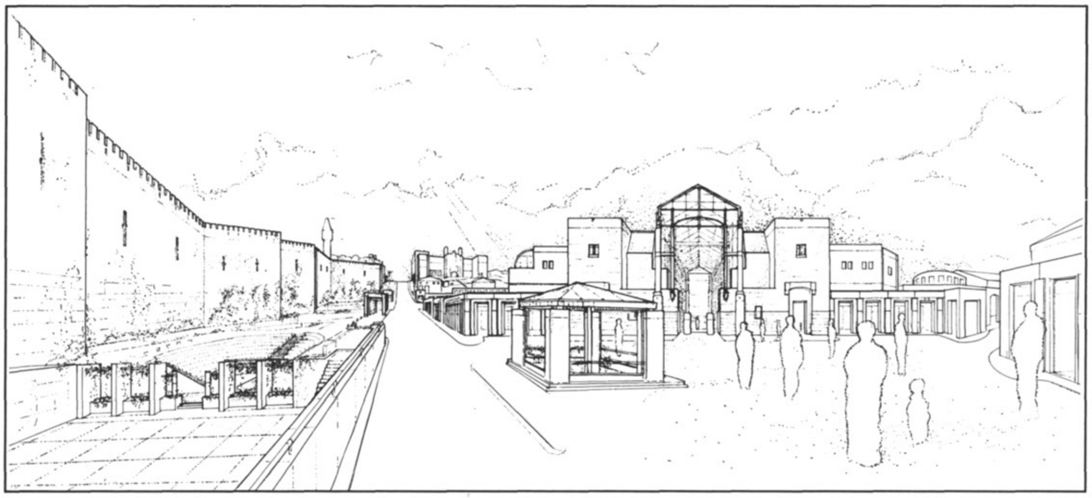

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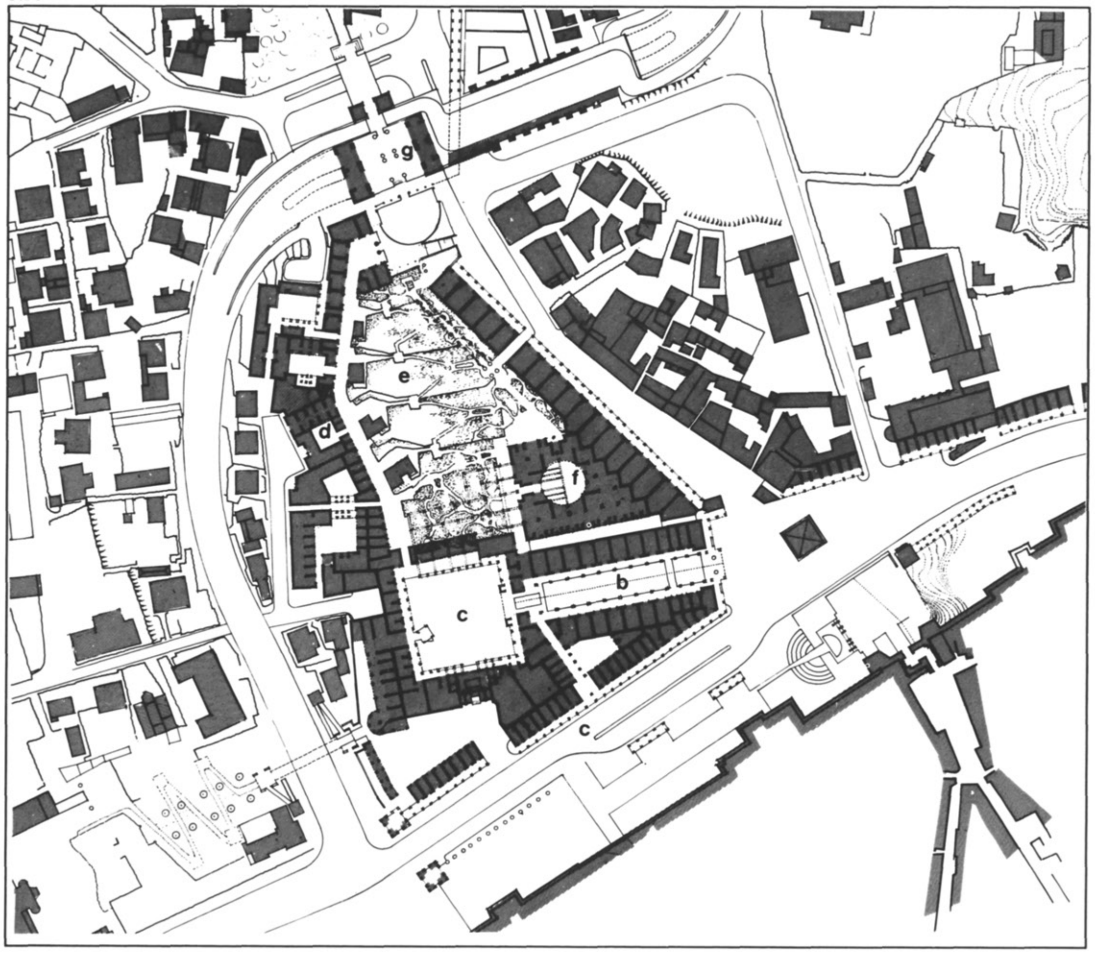

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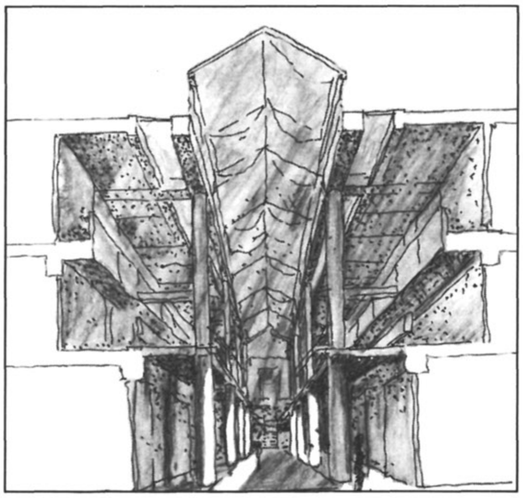

**3.34** *Model, view to the north over the Old City and Damascus Gate (lower right) (Shetrit, Smith).*

**3.35** *Perspective looking west, toward the galleria, with the walls of the Old City to the left (Shetrit, Smith).*

**3.36** *Site plan showing: a. Damascus Gate plaza; b. the galleria; c. shop arcades; d. hostels; e. garden; f. public library; g. bus station (Shetrit, Smith).*

**3.37** *Study of galleria interior. The lower passage terminates at the gate level and the upper level connects the shop arcades with Ha Nevi'im Street (Shetrit, Smith).*

**3.38** *Cross section through the enclosed garden at the heart of the triangle (Shetrit, Smith).*

**3.39** *Longitudinal section through the galleria and the shop arcade (Shetrit, Smith).*

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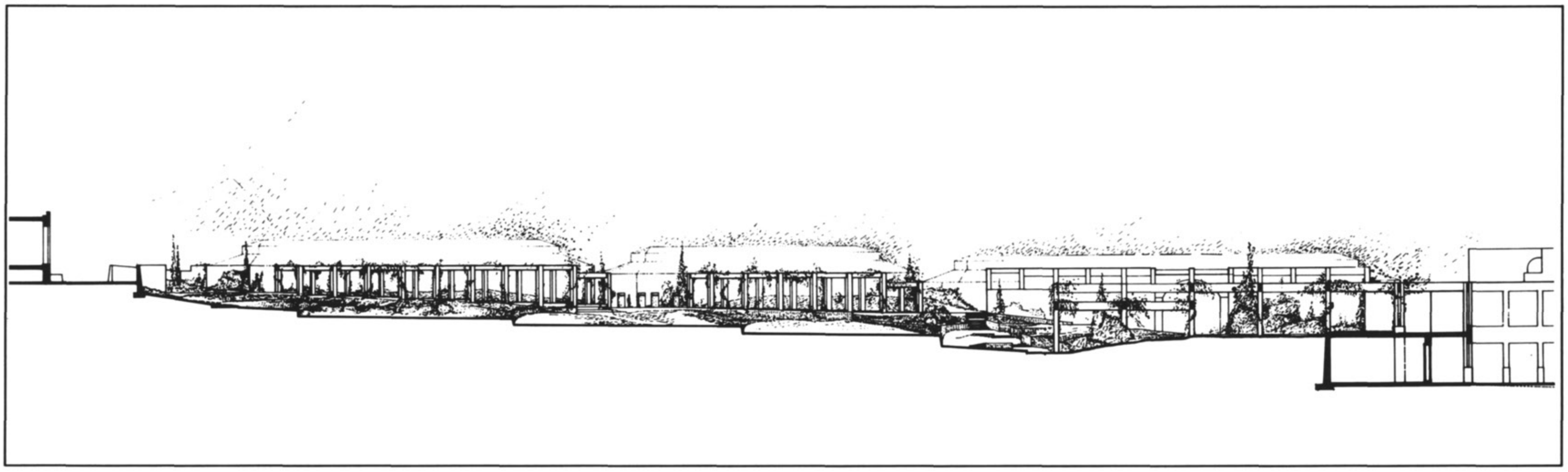

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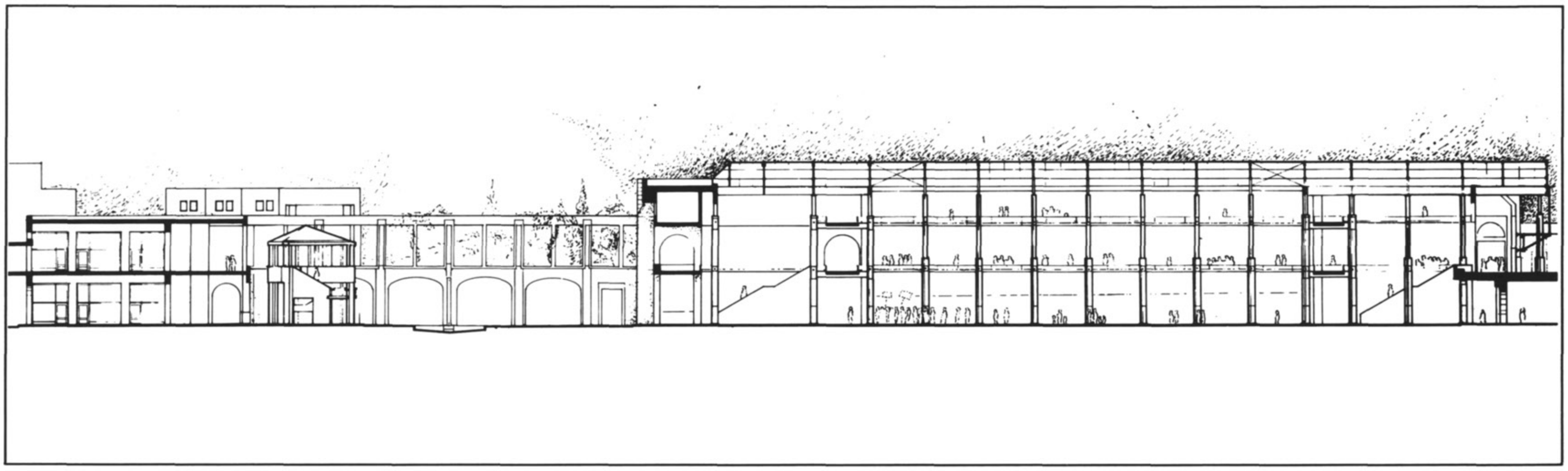

### *Streets and Land Parcels*

All the proposals described to this point depend on the successful construction of a major public structure in a relatively short period of time. Whether built by the government or by private developers, the wall scheme, the bazaar, the great square, or the park with institutions would each involve considerable capital expenditure. In each case, the schemes would not be fully appreciated or effective before major portions of the proposals were constructed. In contrast to these high-capital projects, the proposal by Rudolph Barton and Robert Elliot was modest. What the vacant triangle needs, they proposed, is a framework of streets and building parcels upon which, through time, individual building efforts would slowly appear and create invisible mending of the scar in the heart of the city. Instead of a major architectural gesture, Barton and Elliot proposed the absence of such a gesture, a simple street system similar to what one might find in either the Arab or Israeli business district, creating blocks subdivided into building parcels. A loose land-use diagram would then designate preferred uses. This scheme, like many others, proposed that the principal street in the area should be oriented on a north–south axis, stretching from the gate and terminating in the bus station to the north. Extending from it in a gridlike pattern would be secondary streets that would merge into the surrounding street pattern. Residential, commercial, retail, and other uses would then be constructed on the designated parcels. Barton and Elliot also attempted to resolve the relationship of these new building parcels to the gate by proposing a richly landscaped major park to be traversed by Suleiman Road. The park surrounding the wall would then continue and expand near the gate, which would give Suleiman Road the character of a parkway.

Responses to the Barton–Elliot scheme were determined by attitudes toward urban design. Is urban design the subtle management of individual building efforts over time? Or, in contrast, is it the more heroic and deterministic approach in which building patterns, indeed individual pieces of architecture, are constructed as a means of structuring life in the city? More than any other proposal, the Barton–Elliot scheme declared its belief in the former view. A street framework and individual parcels would lead to the greatest diversity. Normal cities, they argued, emerge and evolve over time. Their richness is the result of the layering of the tastes, preferences, and idiosyncrasies of many builders and designers. Heroic gestures are inappropriate, perhaps impractical, and seem to run contrary to the way in which things are done in Jerusalem.

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**3.40** *Perspective of new Ha Nevi'im Street looking north (Barton, DeBoer, Elliot, Ferreria).*

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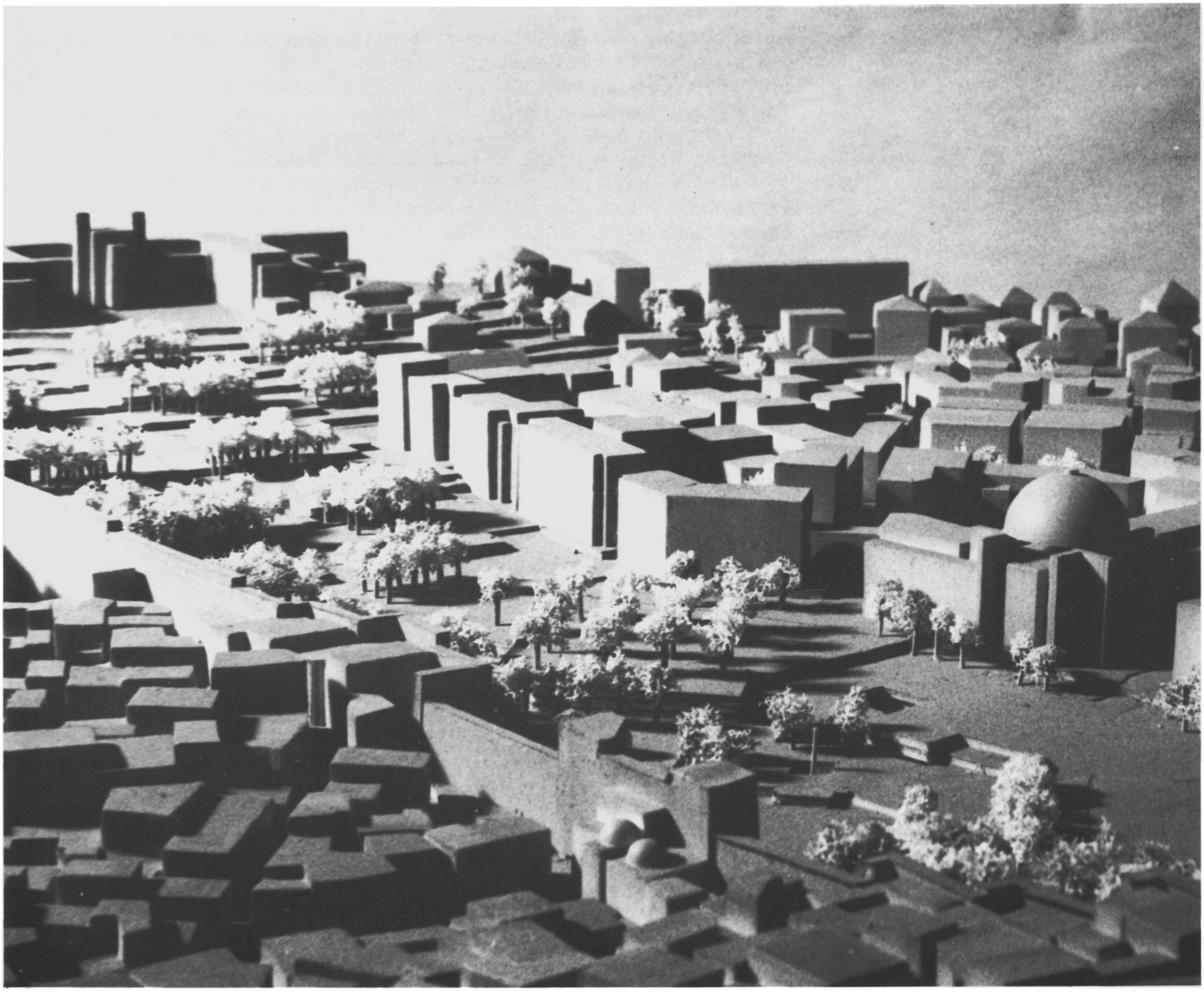

**3.41** *Model, view looking northwest over the Old City with Damascus Gate in the foreground (Barton, DeBoer, Elliot, Ferreria).*

**3.42** *Site plan showing: a. plaza; b. cultural center of the city; c. institution; d. commerce; e. residential; f. mosque; g. synagogue; h. hotel; i. park (Barton, DeBoer, Elliot, Ferreria).*

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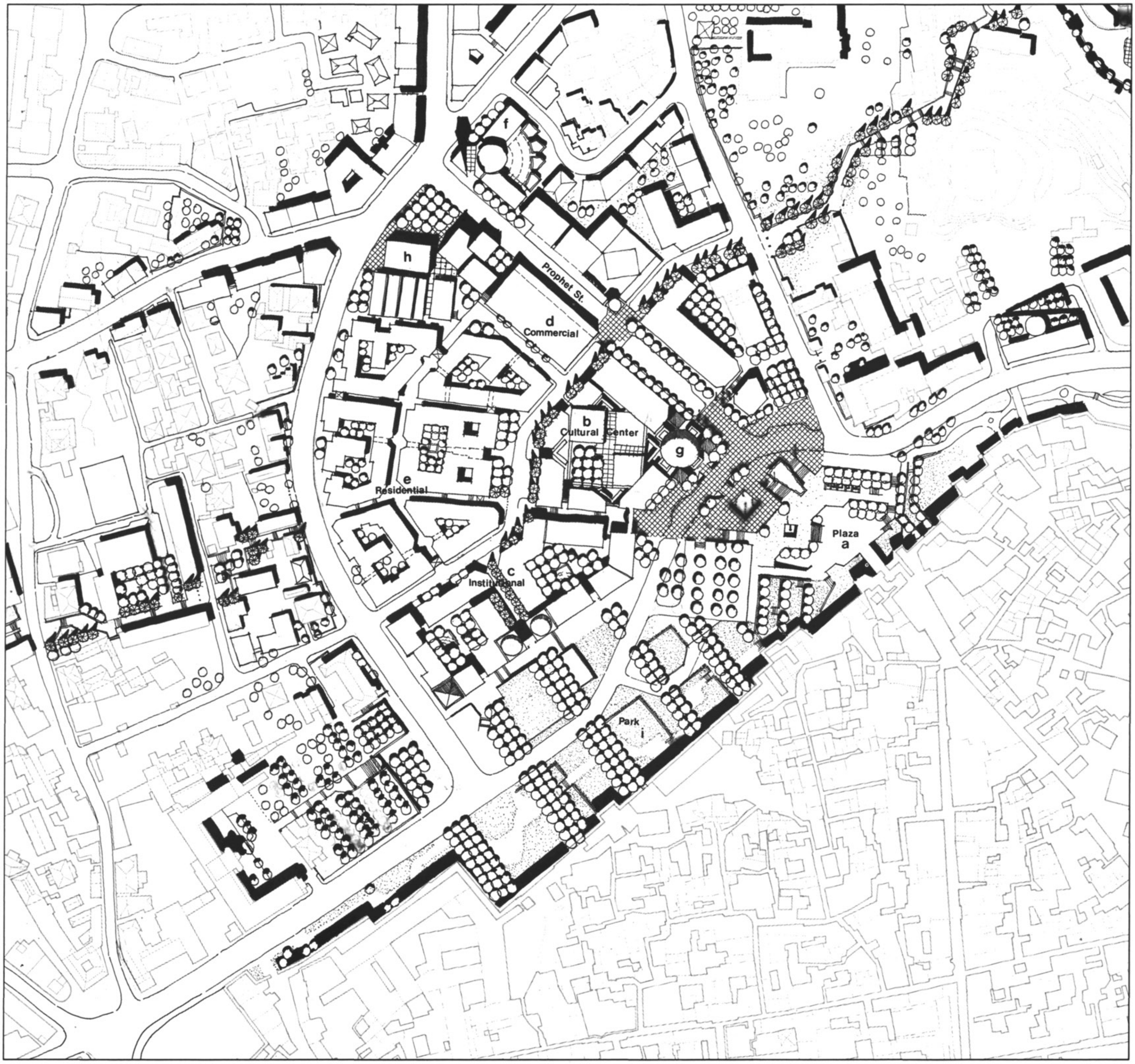

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**3.43** *Open-space diagram (Barton, DeBoer, Elliot, Ferreria).*

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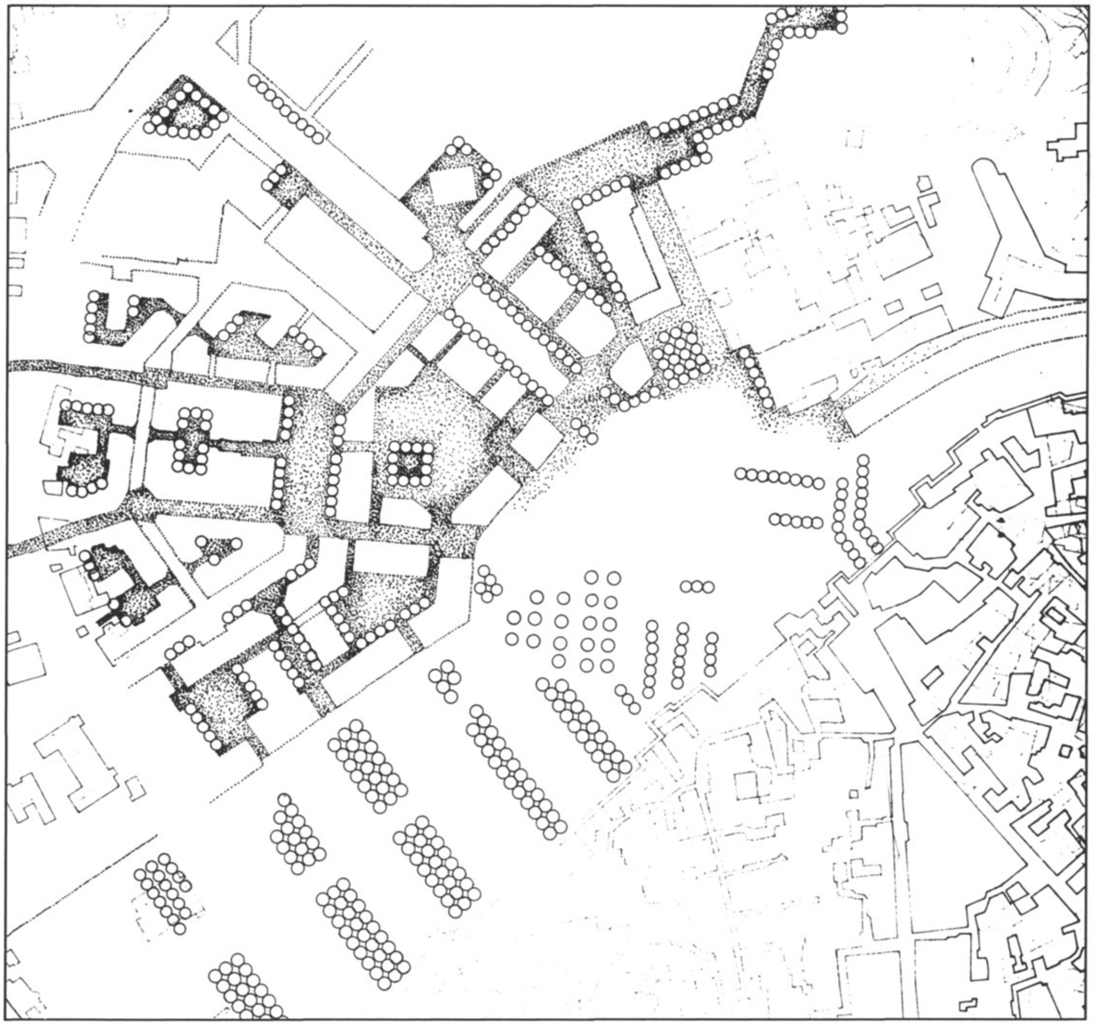
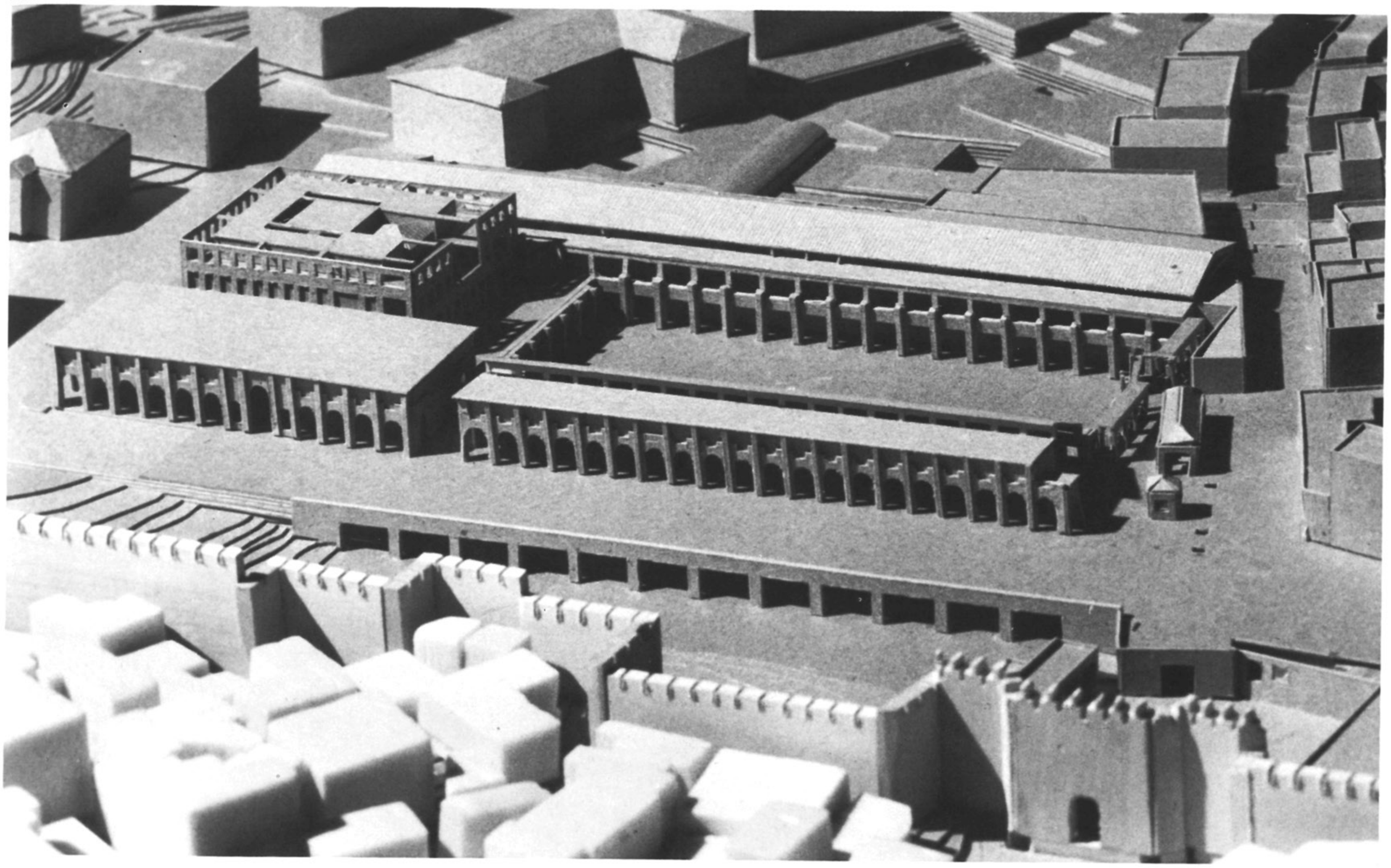


**3.44** *Model, view looking northwest over city walls, with Damascus Gate in lower right (Kapoor, Page).*

## *Excavating a Multilevel Center*

The proposal by Vinay Kapoor and Clifton Page seems at first to fall into a category already discussed, that is, the creation of a public square. It differs, however, in a fundamental way from all other proposals in exploiting the variation of levels on the site — the remnants of the Roman gate, the existing Ottoman gate (approximately four meters higher), and the existing streets (six meters above the Ottoman gate). The plan proposed a two-story square of modest size sunken into the existing terrain in such a way that the floor of the square would be level with the Ottoman gate. It would then be possible to connect the square with the gate under Suleiman Road, thereby completely separating pedestrians and vehicles without tampering with the existing road. This proposal had several other advantages. It created a square that would be visible from the gate and intimately connected with it. By devoting the upper level of the square (that which was at street level, the mezzanine of the major space below) to buses and taxis, Kapoor and Page managed to locate these facilities extremely close to the gate — a major convenience — in the open air, and clearly visible. This strategy overcame the need for

**3.44**



a large underground terminal. They also achieved an attractive ambience in their bus station by unconventionally making it part of the central public space. Finally, they evolved a modest, if somewhat traditional, architectural vocabulary of stone colonnades and arcades, giving the scheme a timeless, well-worn quality.

**3.45** *Site plan showing the underground level connecting the Arab (east) and Israeli (west) business districts to the Old City. The plan includes a plaza in front of the gate, a bus terminal, an underground suq, warehouses, and an arcade of modern shops (Kapoor, Page).*

**3.46** *Sections through the bus terminal and markets (Kapoor, Page).*

**3.47** *Elevation studies of the west end of the courtyard (Kapor, Page).*

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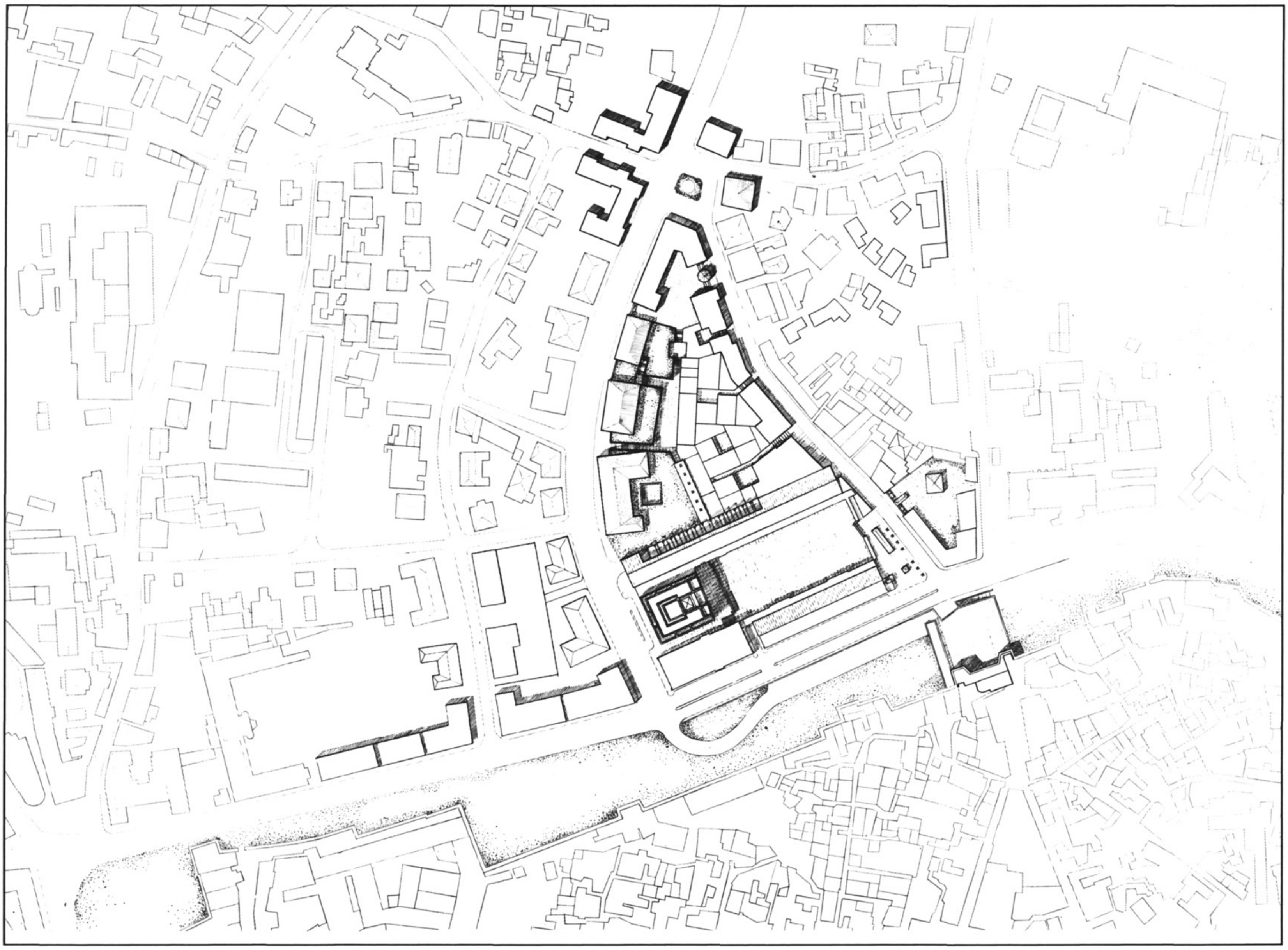

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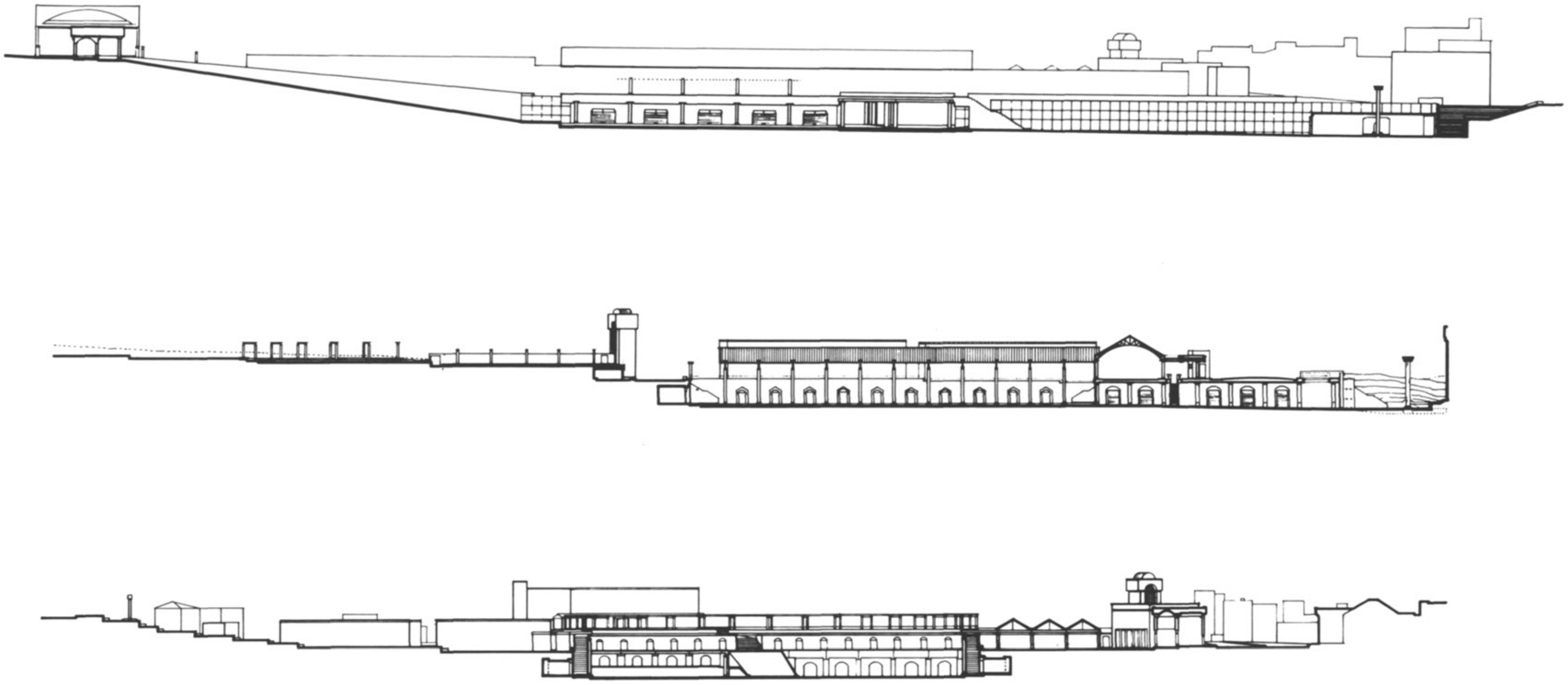

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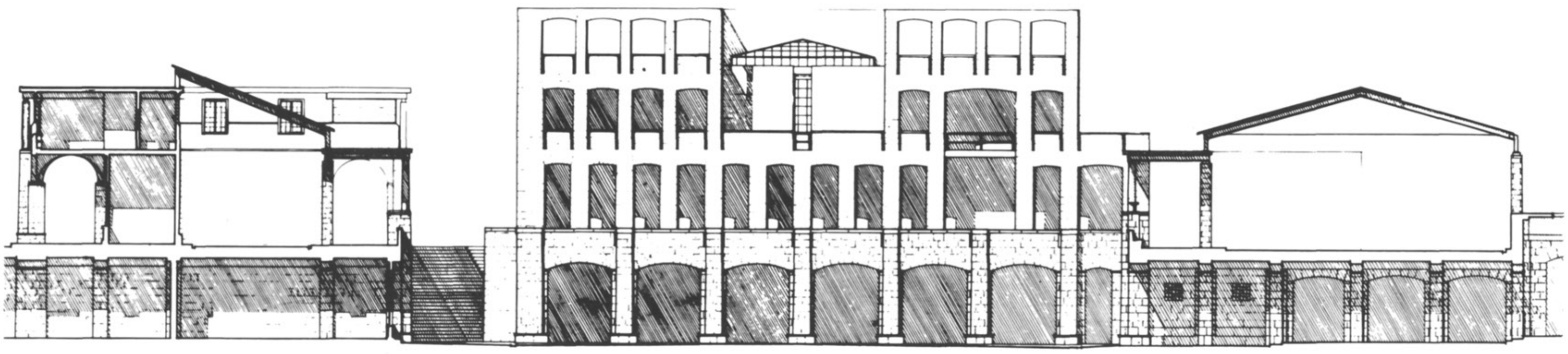

### *Life along the Wall*

The official city policy aimed at creating a park around the city wall had considerable impact on all proposals by the students. The mere fact that the city had spent fifteen years expropriating, purchasing, and demolishing buildings along the wall to enable it to create the surrounding park network made it difficult to think in terms of building against the city wall. All proposals except one had assumed, therefore, that in one form or another the continuous park network surrounding the Old City would prevail and that the city wall with the structures behind it would be physically set apart from the New City. Activities would be concentrated in front of the gate and in structures and public spaces extending from there northward. Those who believed that an axis of urban activity should extend from the gate westward toward Zahal Square, City Hall, and the Russian compound proposed creating continuous arcades or buildings running parallel to the wall at some distance from it.

The exception to this was a plan by Deborah Fennick and Christian Gilot, who proposed that the active life of the Arab central business district, running from Salah El Din Street along the wall to Damascus Gate, should be extended westward, forming an active section of the city bounded on one side by the city wall and on the other by Suleiman Road. Fennick and Gilot therefore proposed the intense development of public spaces and structures, stretching westward from Damascus Gate along the wall. Terraced courtyards and arcaded structures would almost touch the wall. The proposal also included a major museum on the north side of Suleiman Road, which would be almost an extension of the building mass of Notre-Dame. A major city park further north would extend down the valley into Damascus Gate. In taking this approach, Fennick and Gilot challenged the assumption that the Old City must be set apart by park land; they included it in the new city fabric.

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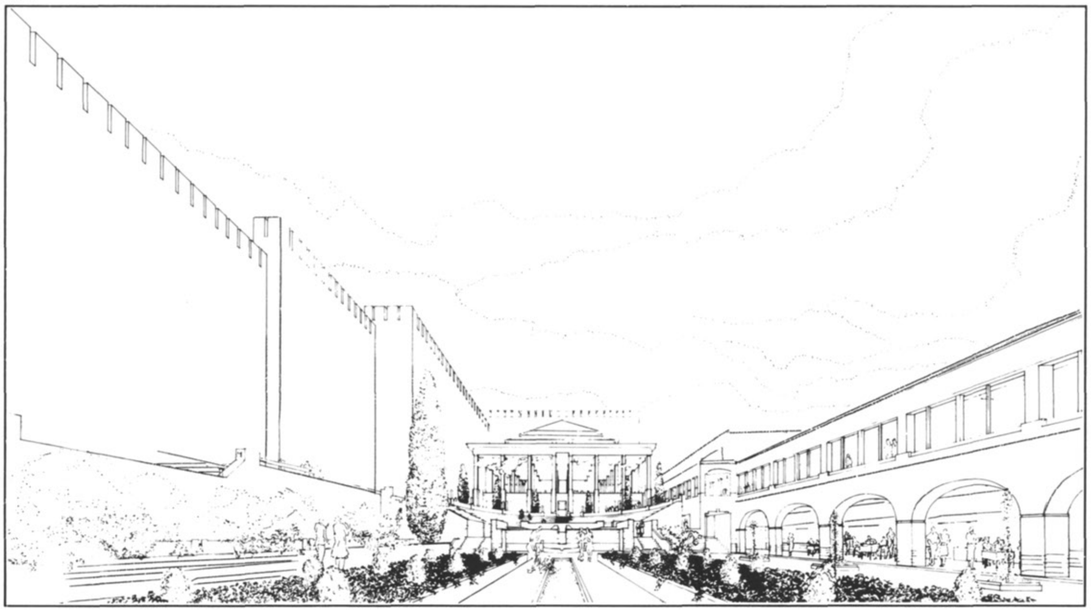

**3.48** *Perspective view to the west along the wall.*

**3.49** *Model, view from north to south. The entire development is concentrated along and against the Old City wall (Fennick, Gilo).*

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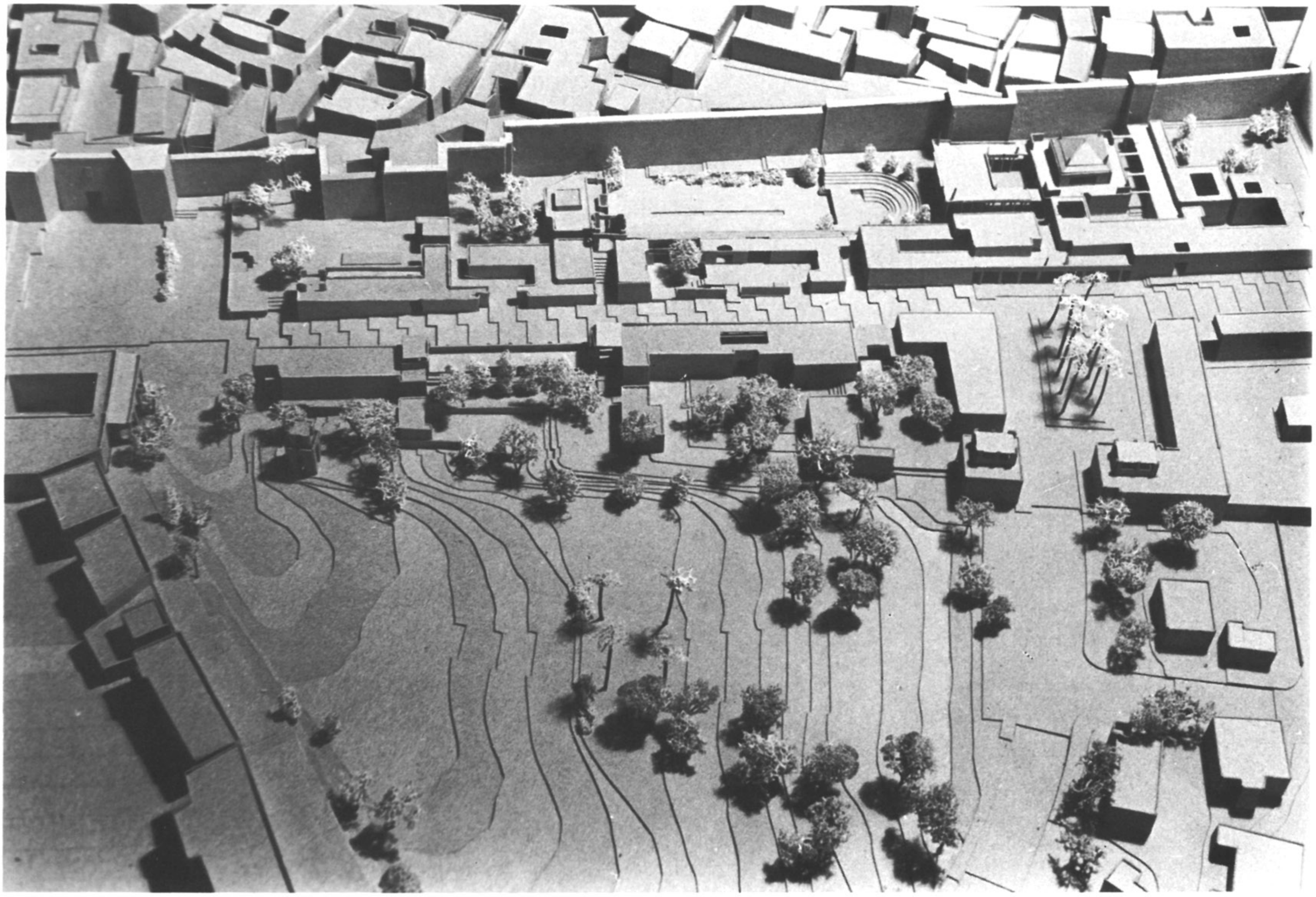

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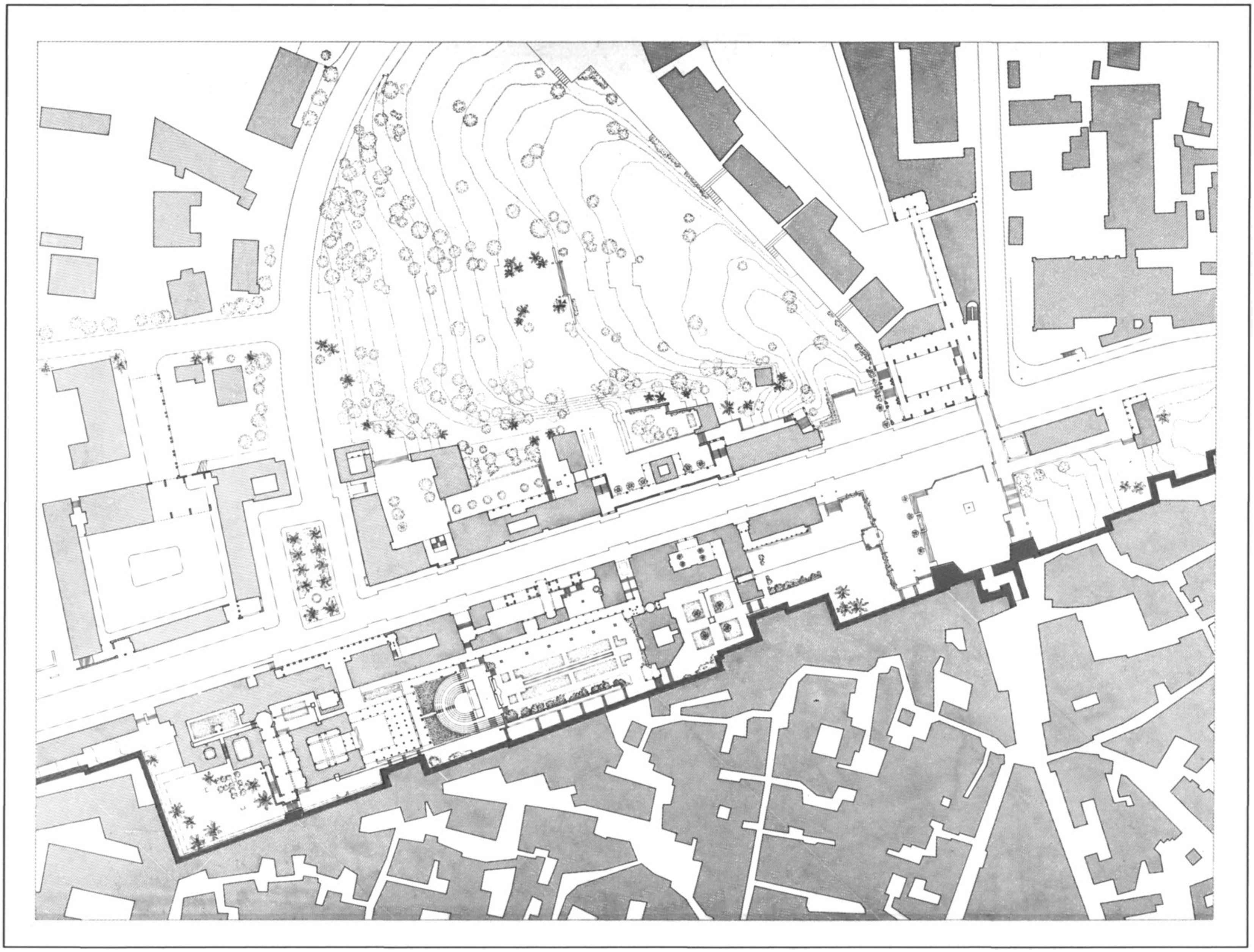

**3.50** *Site plan: Hazanhanim Street remains parallel to the wall; the proposed institutions and commercial development step down along the wall toward the gate (Fennick, Gilo).*

**3.51** *Detail of plan includes: a. museum; b. shops; c. bath; d. gallery; e. public hall; f. library (Fennick, Gilo).*

**3.52** *Longitudinal section parallel to the wall (Fennick, Gilo).*

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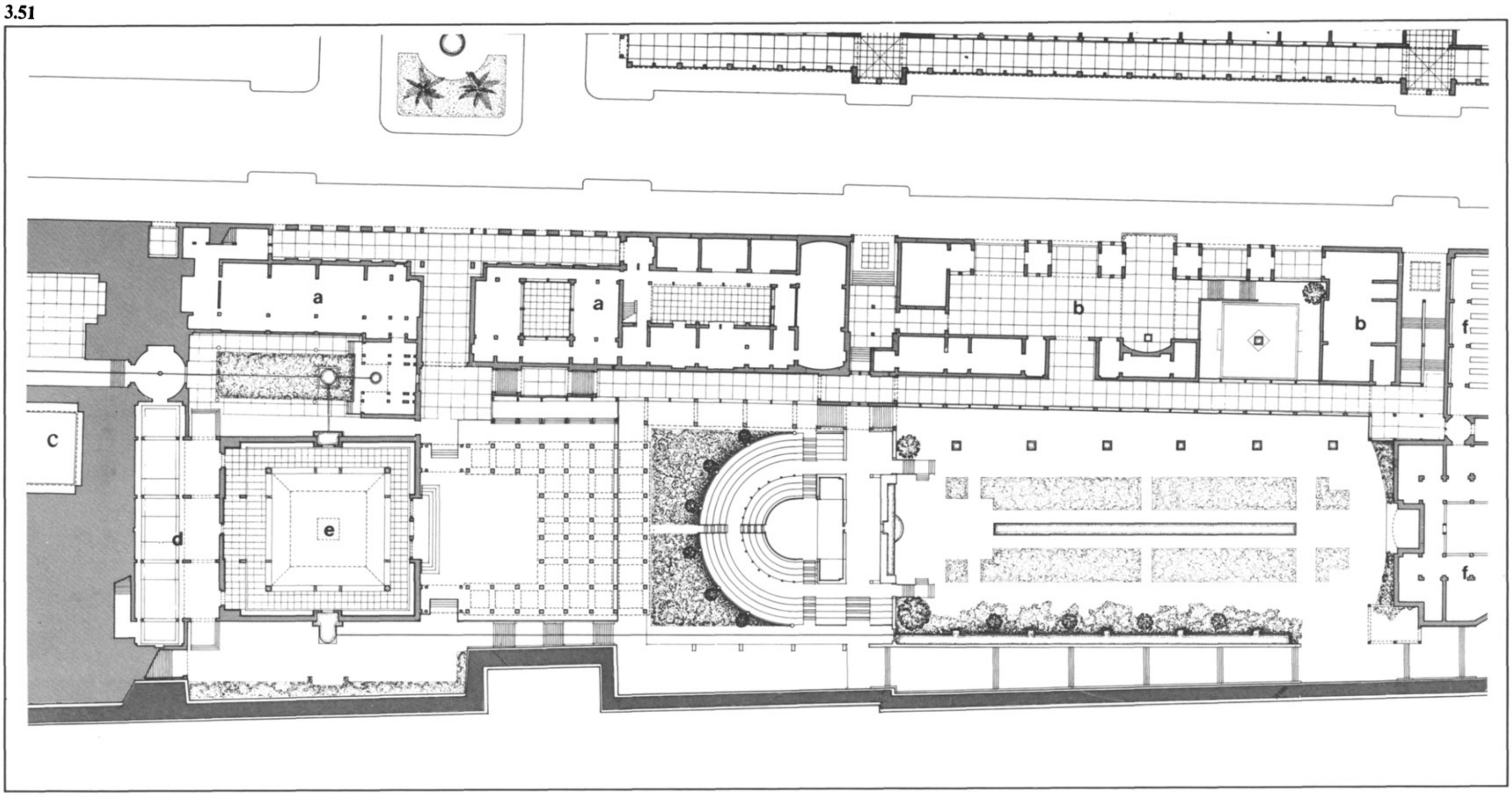

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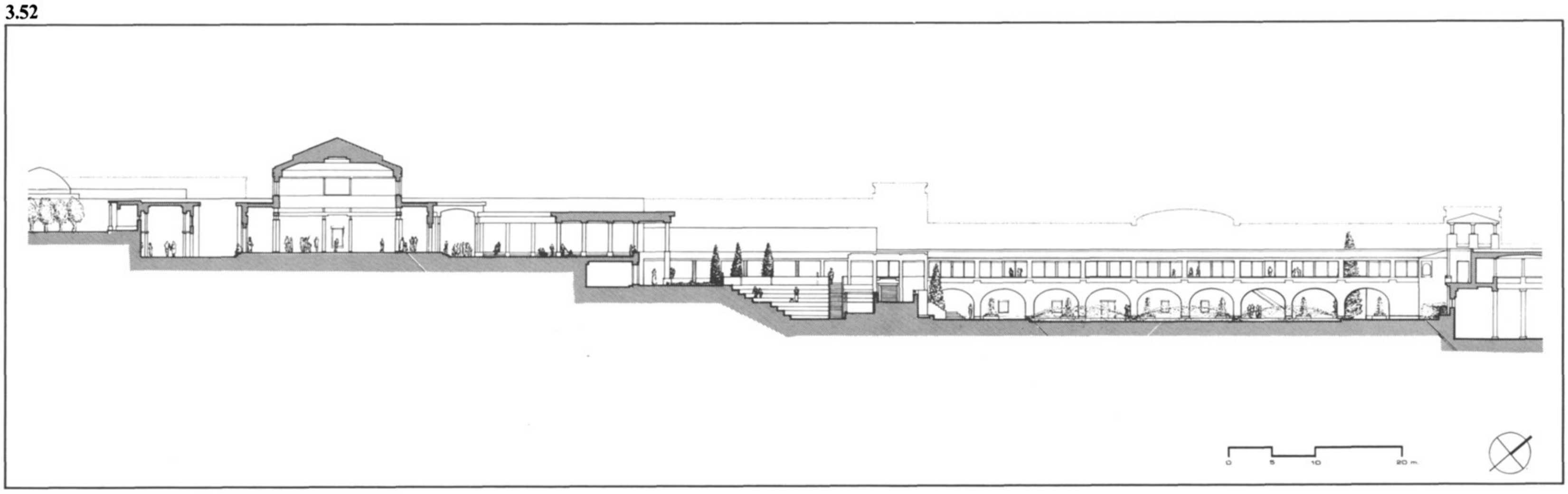

## PROJECT EVALUATION

If this had been an architectural competition, the judges would have had difficulty in choosing a scheme, since the vision of the life of the city and the opportunities of the site varied so greatly in the proposals. Indeed, in most competitions the program for activities would have been established at the outset, so that the judges would have had to choose a project based on the design organization of the prescribed program. In this case, however, the program was not designated, and the students' challenge was twofold: to propose the activities and to give them three-dimensional form. Thus the judges would have had to weigh both issues: an idea and its implementation.

The analogy to competitions demonstrates that the emphasis in choosing design proposals is on the "parti," while the program is taken for granted as a *fait accompli.* But it is in the program that some of the major decisions about the future of a city are established, often with little discussion or debate. Great energy is invested in carrying out architectural and urban design competitions, the object of which is to interpret a program; we rarely invest equal energy in considering the activities themselves. Thus the contribution of these proposals for the Damascus Gate area is in highlighting both the use and physical constraints of this site and their effect on Jerusalem's future.

The studio process incorporated two unusual elements. One was the participation of Richard Sennett, the noted sociologist and urban historian, in the Koetter–Safdie studio, where the impact of the proposals on the life of the residents was explored in a series of seminars. There focused on conflicts between various groups in the city. Most provocative was the view that in a city riddled with conflict, one need not necessarily strive for interaction between the groups (a general assumption made by almost everyone connected with the studies); rather, one could minimize such interaction by giving each community its own clear territory. A similar discussion took place about cultural context. Were not many of the proposals trying to tidy up urban places which, in the context of the Middle East, want to and should remain spontaneously messy? What is wrong, in the informal markets, with the makeshift structures and spontaneous servicing that have marked much of the life of the Old City for centuries? Would the proposals made by the students permit this kind of spontaneous development, or would they force the markets into bureaucratized and overmanaged patterns?

The Kennedy School of Government participated in these studies by assigning to one group of City and Regional Planning students the task of making a cost-benefit analysis of the urban design proposals for Damascus Gate. Toward this end, the students attempted to establish qualitative and quantitative evaluation criteria. They began by making preliminary cost estimates of each proposal and breaking them down into cash flow projections, based on the phasing that each group had proposed. Assessing in the traditional way private and public capital expenditures, on the one hand, and revenues and land evaluation, on the other, they also attempted to develop a basis on which social benefits might be evaluated. At the end of one semester's study, they concluded that the project of greatest overall benefit was the Shetrit–Smith proposal, followed by the Kapoor–Page proposal.

The workshop discussion at the Kennedy School highlighted the difficulty of arriving at evaluation criteria for a project of this kind, particularly when the interests of both the public and private sectors, as well as of the community at large, are considered. For example, capital-intensive projects might indicate a high return and hence advantageous economics, only to fall flat on their face if market demand is not there. Similarly, basic facilities such as transportation and other community amenities, even when clearly desirable, would depend on the availability of public funds, often the result of establishing priorities with competing public projects. This highly politicized process is often difficult to assess in individual project evaluation. Finally, the evaluation was confused by defying normal market criteria. Since land is predominantly publicly owned, the value set upon it is in part arbitrary, a result of designated land use (itself controlled by the public), and only in part responsive to market conditions. Thus, for example, if the site were designated as a park, one could argue that the resulting land value would be zero; hence the project would be of minimal cost to the public except for the cost of infrastructure and lost tax revenues. If, on the other hand, land value were estimated on the basis of commercial zoning and then a decision made to create a park, this would show as a major deficit to the public purse.

In the case of vacant land, valuation was difficult and inconsistent; in the case of built-up land requiring expropriation, demolition, and relocation of residents, one would have to add the actual cost to the public agency that cleared the land and made it available for its new use. Thus, the Kennedy School studies exposed what was already known in Jerusalem as a result of experience in projects such as Mamilla and other major urban design proposals for the central business district: project evaluation does not lend itself to careful, straightforward measuring, and this only fuels the controversies and public debate over the relative merits of various proposals.

4.1

# 4 CITY FOR HALF A MILLION

## THE FORCES OF CHANGE

Preservation and conservation of the Old City are only a small part of the challenge facing the planners of Jerusalem. If the city slowly grew and evolved, time would act in the service of the planners. Neighborhoods would emerge in the traditional way; roads would be planned, parcels built upon; vacant land at the periphery would slowly be consumed. But development in Jerusalem is not a slow process of evolution. There is an upsurge — one could almost say a hysteria — of development generated by both internal and external forces of formidable magnitude. Thus the entire region is affected, and the Old City becomes almost a tiny postage stamp on the expanding map of the urbanized region. The character and heritage of Jerusalem can, therefore, no longer be affected simply by protecting the Old City and taking care with its restoration. Since 95 percent of the population of the city lives and works outside the confines of the wall, it is the new city, both its central and the newly developed outskirts, that constitutes the daily environment for most Jerusalemites. Even for the pilgrim and the tourist who come and stay in the hotels, use the restaurants, and enjoy the recreational facilities, Jerusalem is no longer the Old City perched on the mountaintop, but a bustling metropolitan area nearing half a million in population. The character of the roads and buildings, the neighborhoods, the landscape in the New City are, to a great extent, what one experiences, indeed what one remembers.

The internal forces causing expansion include the growth of population, growth of real income, and growth in the number of cars on the roads. Some of this is caused by, so to speak, natural forces. The expanding economy attracts labor. The Arab population, in particular, flocks in from the surrounding region, attracted by employment opportunities. Some of the growth is induced: the government of Israel, seeking to keep the ratio of Jewish and Arab population intact, has gone out of its way to create incentives that would attract Israelis to Jerusalem. To this must be added the natural growth of the population (3.7 percent per annum) and the constantly growing standard of living. With it there is more demand for shopping, greater ownership of private cars, and many other facets of urban development brought about by affluence.

The external forces center on the tourists and pilgrims. The united city is an infinitely more appealing place to visit than the divided Jerusalem of pre-1967. Tourism has thrived in all sectors; there have been Jewish pilgrims from the United States and Europe, Christians from all over the world, and, more recently, Muslims from the Arab countries taking advantage of the summer visit permitted by the Israeli authorities. To this must be added the internal tourism; Jerusalem is one of the most popular visiting sites for Israelis, who come particularly on the Sabbath and during the holy seasons. Tourism is expected to grow and with it the hotels and the myriad services that tourists require. The pressure on the Old City has already been demonstrated, but the entire region is affected as well.

**4.1** *General view of Ramot, 1982.*

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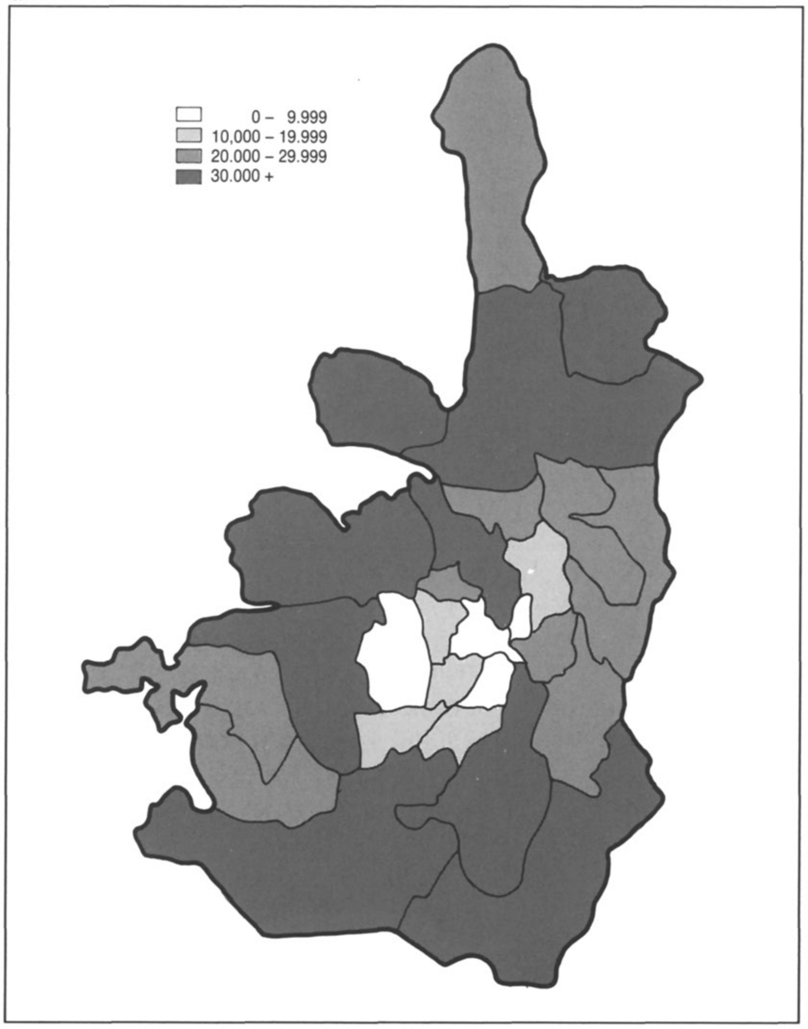

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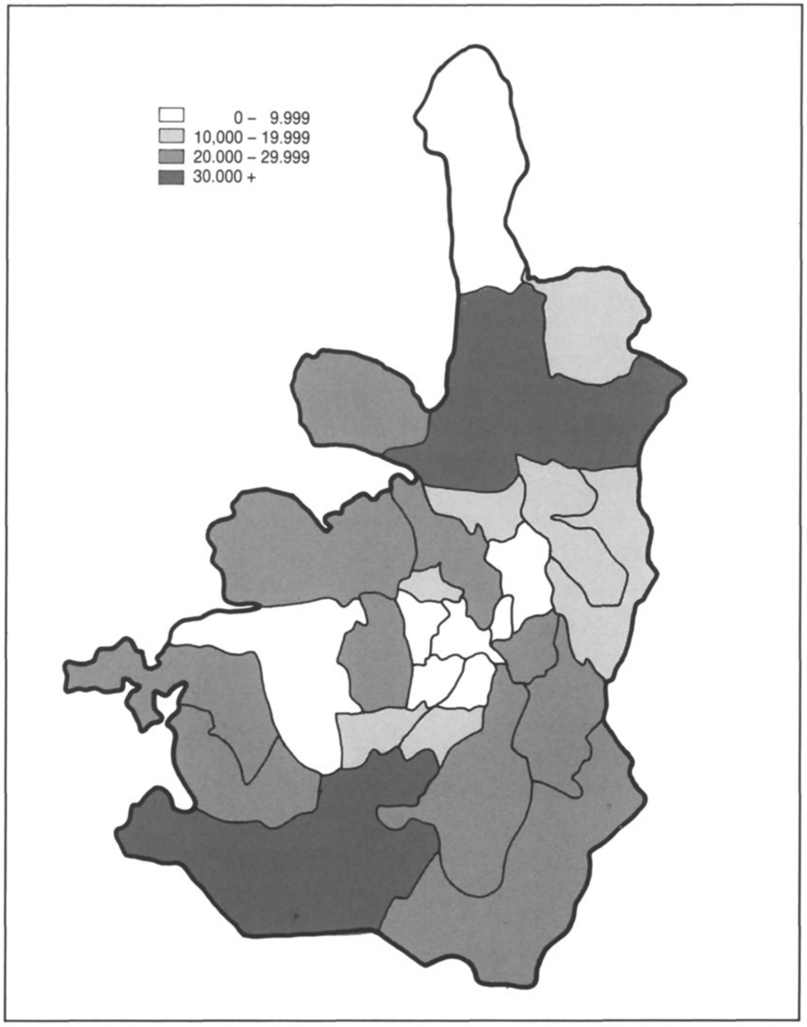


**4.2** *Population projection within the city limits in 1987.*

**4.3** *Population projection within the city limits in 2000.*

## RECENT MASTER PLANNING IN JERUSALEM

The first plan that attempted to come to terms with the unification of the city was the 1970 plan by Hashimshoni and Schweid. In traditional form, it included the transportation plan with accompanying land-use and zoning recommendations. An American transportation consultant, J. E. Leisch and Associates Transportation Engineering from Evanston, Illinois, had considerable influence on this plan. It pivoted on the notion of giving Jerusalem a modern road system. A grid of limited-access expressways was proposed: two running north–south, three running east–west. In addition to the supergrid of expressways, there were secondary and tertiary grids of arterial roads. Complementing this was a ceremonial boulevard running east–west from Mount Herzl past the Old City toward Mount Scopus.

The plan was presented to the Jerusalem Committee shortly after its completion. As might be expected, it was the subject of severe criticism. In order to accomplish, at least on paper, a network of expressways traversing the city, the planners had to resort to extreme measures. Route 1, for example, the north–south route by the Old City, ran through the Valley of Hinnom, taking part of the historic neighborhoods of Yemin Moshe, and required a cloverleaf intersection right next to Jaffa Gate; it then dipped underground into a tunnel under the northwest corner of the Old City and emerged in the northern part of the Damascus Gate triangle. Other arteries required demolition of historic areas such as the Ethiopian quarter, Nachlaot, and Rehavia. Obviously, the grid network of expressways was not well suited to a city with a complex terrain and studded with historic neighborhoods. Further, the planners had assumed both increasing car ownership and a high level of service and mobility for all residents and visitors — an objective considered by many to be unattainable.

The 1980 master plan, which was drastically revised by Schweid in collaboration with the City Planning office, abandoned the elaborate road system of its predecessor. In retrospect, the funds required by the 1970 plan could never have been raised; thus the hysteria that met the plan was something of an overreaction. Time would have taken care of it, in any event. The 1980 plan continued to emphasize consolidation of the city center. It was somewhat ambiguous about secondary centers in the northern and southern part of the city, a proposal that had originated with the 1970 plan and had been constantly debated ever since. The impact of secondary centers on a downtown area is major, a subject to which we shall return later.

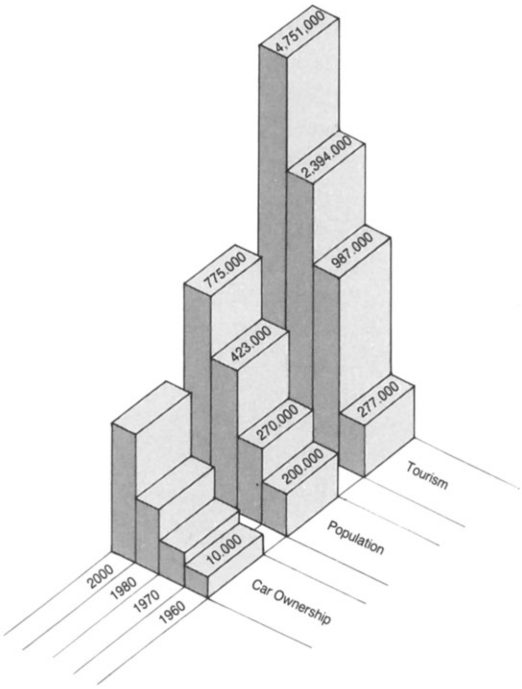
A number of secondary amplifications proposed by the city engineer in the 1980s emphasized development along the historic routes leading to the Old City: the north–south route toward Ramallah, the western route toward Jaffa, and the southern route toward Bethlehem. The proposal stressed that the plan was not for more strip developments, with construction stretched out along arteries, and suggested that some more compact form of development could be built along the routes. It did not, however, explain how this would be achieved. How would development along the arteries come to terms with the heavy traffic along the routes? Would that not lead to large parking areas and hence to the traditional strip? How would the development maintain any form of compactness, if it is in the nature of development along routes to stretch linearly? Thus, the general statement of the development along the historic routes — a theory that appears to have some merit — did not specify the urban design framework by which it would be implemented.

Ironically, both the 1970 and 1980 plans were ignored by the central government. Both plans called for consolidation and the construction of new neighborhoods as a natural outgrowth to existing neighborhoods, thus keeping transportation networks short and maximizing the available infrastructure, amenities, and services. But the Ministry of Housing, as a result of its own strategic planning, totally ignored the master plan recommendations and planned the location of neighborhoods without regard to any of these concerns.

Both plans were reviewed by the Harvard teams studying the region, the central business district, and the outskirts of the city. The students immediately identified problems that have plagued other development plans. For example, the large neighborhoods built by the Ministry of Housing under a single hand possessed all the problems of urban renewal projects in the United States, such as failure to achieve a level of richness and diversity and maintaining the "project look" even many years after completion. Similarly, the students could spot the tyranny of the transportation engineers. Road standards seemed to be coming from the world of fantasy: four- and six-lane arteries served modest neighborhoods; and standards insisted on 5 percent maximum slopes and large turning radii, which were difficult in the complex, steep topography of the region, required severe cut-and-fill operation, and caused irreparable defacing of the landscape. Quite clearly, transportation engineers were setting standards unknown in the older neighborhoods in Jerusalem and indeed in most contemporary cities and were doing so without considering the very special and unique landscape in which they were working.

Finally, the students could identify the incompleteness of master planning, that is, of traditional transportation and land use planning. Land use plans, they soon rediscovered, had little impact on the quality of what was built. Without guidelines about scale, size, relationship to terrain, and the character of public and private networks, the master plan had little impact on what actually got built. In the case of Jerusalem, it did not even seem to determine *where* things were built.

**4.5**



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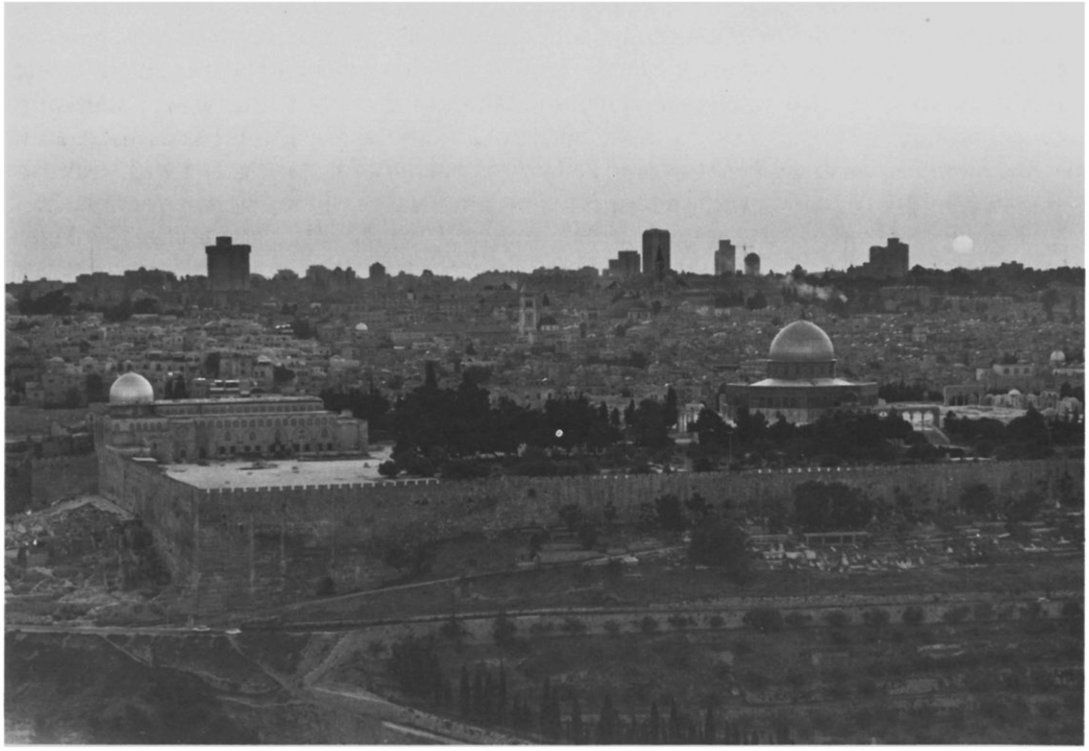

**4.4** *The homogeneous, picturesque landscape of the Old City contrasted with the new city's skyline. The high-rise buildings at the background are a real measure of development pressures around the Old City and in the downtown area. It is also a vivid demonstration of the "effectiveness" of the 1970s control tools to mitigate development in the downtown area.*

**4.5** *Diagram of growth of tourism compared with population growth in Jerusalem and car ownership between the years 1960 and 2000 (source: Kennedy School of Government, Harvard University).*

## THE POLITICS OF URBAN DESIGN

If the preceding observations had to do with general issues, the students also identified the uniqueness of the Jerusalem situation, where the primary planning decisions are the result of national, geopolitical strategies. It was the overriding policy of the government of Israel to prevent another division of the city. To meet this objective, the strategy of dispersed neighborhoods was developed. New neighborhoods were constructed with enormous public funding throughout greater Jerusalem, and new Israeli neighborhoods were carefully interspersed with existing Arab ones. No planning rationale was allowed to interfere with this process; travel distances to jobs and difficulty of terrain were given second consideration. The first network of neighborhoods built in the 1970s were within the city limits, but at the beginning of the 1980s, yet another ring of new settlements outside the metropolitan municipal boundaries were constructed. Ma'aleh Adumim, for example, was designed to house 10,000 families in the year 2000 and would include industry. A satellite town on the way to Jericho, it is clearly outside Jerusalem's immediate sphere of influence.

The burden of these policies, at least at the municipal level, was enormous. The cost of building roads, schools, and other services was borne by the central government, but the municipality had to bear the burden of actually operating the dispersed system. More seriously, the settlement of people outside the city limits in places such as Ma'aleh Adumim deprived the city of potential residents, taxpayers, and active members of the community.

It was natural, therefore, that as part of the Jerusalem studios, faculty and students felt that they should explore the ways in which the somewhat irrational pattern of settlement in the city could be modified and improved. Paramount in their minds were some immediate issues. New neighborhoods were yet to be built in the north and south. Could they be designed in character and in location so as to begin weaving together the disparate parts of the city? What relationships between Arab and Israeli populations would emerge from this development? Several major roads were about to be constructed to serve these new areas of the city. What would be the preferred alignment and character for such roads? Is it possible to unify the city through the open-space network? What areas should be developed and what areas preserved as open space for recreation and as a green belt? Should construction take place on the hilltops, on the slopes, or in the valleys? The students also observed the very different urbanization patterns of the Arab and Israeli communities: the self-built, low-density, village-like sprawl of the Arabs contrasts with the highly centralized, totally controlled Ministry of Housing developments on the Israeli side. The visual and social contradictions made further exploration essential.

## CONCENTRATION OR DISPERSAL: A SINGLE CENTER?

As the city expanded, the pressure on the downtown business center grew. Increased demand for retail facilities created an uncompetitive market. The concentration of shops in the triangle defined by King George, Ben-Yehuda, and Jaffa streets led to congestion. The narrow roads leading to downtown and the limited parking areas in the center could not cope with the increased population and growing car ownership. The central business district that had evolved to serve a city of 200,000 people clearly could not keep up with a city of half a million. Increased demand for office space from the private sector led to the infiltration of such businesses into the surrounding residential neighborhoods. These developments, as well as the poor condition of buildings in the central business district, led the city planners to consider ways to remedy the situation.

Conditions in Jerusalem were not without precedent; a similar phenomenon had occurred in Tel Aviv. The small, compact center that had served the city until the 1950s could not cope with the expanded population and pressure of automobiles. In response, the center began to shift — first northward along Dizengoff and Ben-Yehuda streets, then east and north inland as new retail centers and clusters of office buildings sprang up near the new city hall. As the center shifted into newly developed areas, it was possible to introduce a road system of greater capacity. The migration of the center in Tel Aviv paralleled population shifts, as "Old Tel Aviv" was abandoned and new neighborhoods sprang up around the relocated center.

In the 1970s various authorities were considering the best way to accommodate the expansion of Jerusalem's center. Several scenarios were proposed.

1. Plans developed by the municipality proposed that the existing center be expanded and consolidated in its present location so that it would continue to serve the region as a whole. To facilitate this expansion, it would be necessary to widen the road system serving the downtown. Jaffa, King George, and King David streets would be widened and improved to accommodate more traffic; new roads would serve the center from the north; and several large parking structures would be constructed at the points where these arteries entered the downtown area. In this scenario only small, subsidiary neighborhood centers would be permitted in the outlying neighborhoods, so that the downtown would continue to serve the entire region. The proponents of this scenario considered it important that there be a single downtown area to both reinforce the city's unity and to develop a center that could serve both residents and tourists on an expanded scale. Furthermore, only the consolidation and expansion of a single center, the proponents of the plan believed, would make it possible for Jerusalem to compete with Tel Aviv on a qualitative basis. (Several studies had shown that many Jerusalemites traveled to Tel Aviv for their serious shopping. Surveys indicated that residents' habits were influenced by the greater variety and choice in the Tel Aviv shopping districts.)

Critics of this scenario pointed out the enormous cost of implementing the road and parking network. They could demonstrate that although some of these plans had been on the books since the 1960s, little progress had been made in constructing the proposed roads.

2. A new school of thought emerged in the 1970s, which proposed that in addition to the existing downtown, two major secondary centers should be constructed for Jerusalem. One center would be located in the southwest area between Manchat and Gilo, the other along the northern route toward Ramallah, serving the northern sector of the city. The theory was that expanding the existing downtown would be prohibitive in cost and that secondary centers could be constructed more economically on virgin land and would have good access and open parking. The southwest center would serve some 150,000 people in that region; the northern center would serve a similar population, including Ramot, Neveh Ya'acov, and the Arab population to the north.

The proponents of the plan probably did not realize how similar this scheme was to the construction of large-scale suburban centers in American cities. These suburban malls emerged precisely because ease of access and proximity to the expanding neighborhoods made it more convenient for residents than the downtown area. Furthermore, in many American cities the malls successfully competed with the unattractive conditions of city centers. The impact of suburban malls on American city centers is well documented.

Critics of this proposal asserted that the suburbanization of Jerusalem's retail business would lead to deterioration of the existing downtown. With their siphoning of resources, ease

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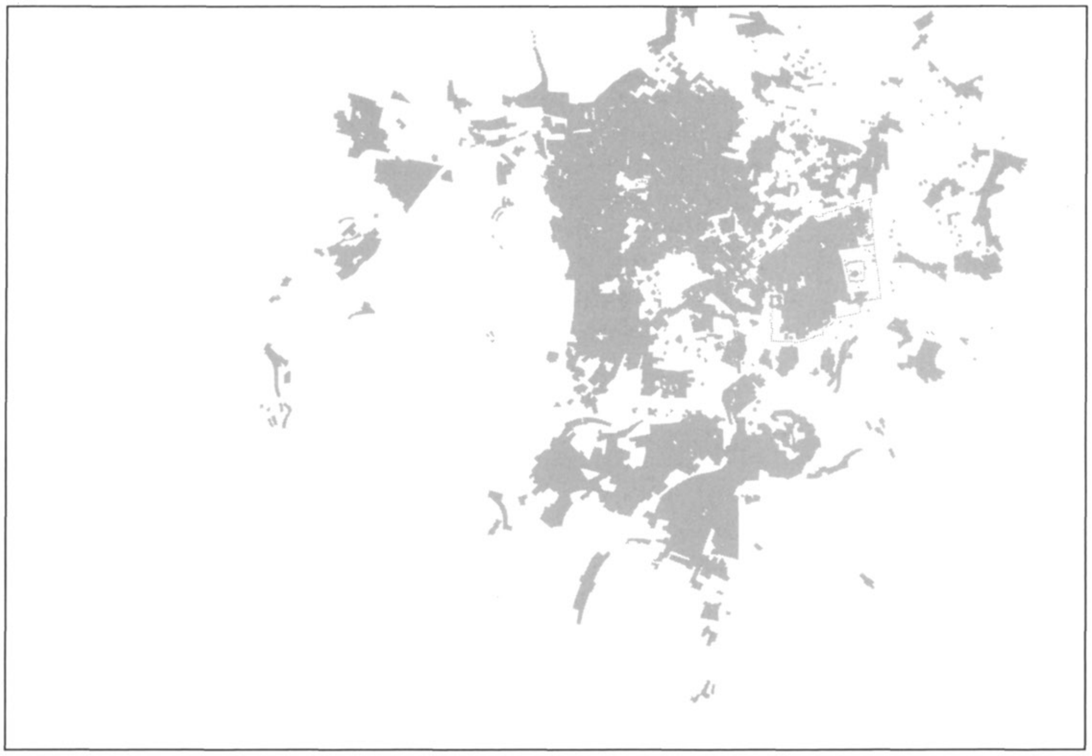

**4.6** *Bab el Khalil Street, a narrow street in the Arab downtown across from Herod's Gate. It is a two-way street with one parking lane, despite its limited width.*

**4.7** *Ben-Yehuda Street soon after the unification of the city in 1967. The street is one of the busiest commercial streets in the downtown area. Traffic congestion was common before it was closed to traffic in 1983.*

**4.8** *Extent of urbanization in 1967 (source: Jerusalem Atlas).*

of access, and economy of development, the secondary centers would in time deplete the downtown area of its resources and lead to the division of Jerusalem into disjointed sections. Criticism notwithstanding, both centers were adopted as part of the 1980 master plan.

3. A variation on this proposal allowed a series of centers to develop along the historic routes toward the west, the south, and the north. At first glance, such expansion appeared to be more organically linked to the existing downtown, and, in a sense, a natural, continuous development. To a certain extent, this approach had evolved unplanned over the previous twenty years. Considerable commercial development serving the expanding Arab population had taken place in strip form toward the north along Ramallah Road. Downtown Jerusalem also expanded westward, first with the construction of the Clal Center, a three-level shopping mall at the western edge of downtown, and then along Jaffa Road near the Hilton Hotel, the central bus station, and the entrance to the city from Tel Aviv. It was difficult to conceive, however, how this type of strip development could serve the same needs as the downtown area, nor was experience with it to date very satisfactory. Retail centers along heavily trafficked arteries are difficult to accommodate, and they eventually require the construction of alternative arteries to the detriment of the retail development.

One of the unanswered questions concerning these options was whether the unused land in downtown Jerusalem could accommodate growth if it were focused primarily within this area. This question was the subject of an extensive study by a planning workshop in the Kennedy School of Government, carried out under the direction of Jim Brown and Jose Gomez-Ibanez, which led to a number of surprising conclusions.

In addition to the macro-questions about the region, there were many micro-questions about the mode of development within the downtown area. These issues concerned the impact of the development on the Old City; the mode of development for the vacant land areas at Damascus Gate and Mamilla; the policy toward the shift of downtown westward; and the related transportation and urban design questions. These were to be the subject of studies carried out under the direction of Visiting Professor Arieh Rahamimoff.

The shifting of the downtown center in Tel Aviv had little impact on the social, cultural, and political balances of that city. Clearly, the population shifted with the center. The proposed redeveloped Manshiah Area attempted to bind together Jaffa and Tel Aviv and keep downtown expansion within the historic area. It became clear during the 1970s and 1980s, however, that the market forces were pushing development out of the historic center northward; but it was never assumed that the shift would affect the city's social fabric.

The situation in Jerusalem was quite different. Construction of secondary centers would tend to focus much of the Jewish retail business within those centers located at the heart of the new neighborhoods. The locked-in Arab central business district would then expand into the vacuum created downtown. The secondary-center policy could, therefore, lead to a highly divisive situation in which the various national groups in the city would become even more geographically separate.

Similarly, the diverse policies would result in different relationships among city activities and the Old City. The secondary centers, as well as the shift of downtown toward the west, would increasingly separate the living heart of Jerusalem, its business district, from its spiritual and historic center, the Old City, which would tend to become a separate museum piece. Planners within the central government considered such a development a positive one, since they believed that the Old City should be protected from the pressures of commercial development. Critics of this approach pointed out that Jerusalem's richness depends on the fact that its historic religious and cultural centers have been closely linked to its business life.

**4.9** *The new neighborhood of Ramot. The extent of government-initiated development naturally affects the traffic pattern. Residential communities (or bedroom communities) result in greater commuting to the employment center. Almost always in the new neighborhoods transportation planning dominates the growth of the urban fabric. Very often this planning adopts highway standards of design even for local streets.*

**4.10** *The main spine in the new neighborhood of Gilo, connecting the commercial center with residential areas. The uniform appearance of the buildings manifests the techniques of large-scale development initiated by the Ministry of Housing. The scale and magnitude of construction essentially affect the landscape.*

**4.11** *Extent of urbanization in 1982 (sources: Jerusalem Atlas, C. Steinitz studio, and Kennedy School of Government, G. Brown workshop, Harvard University).*

**4.9**

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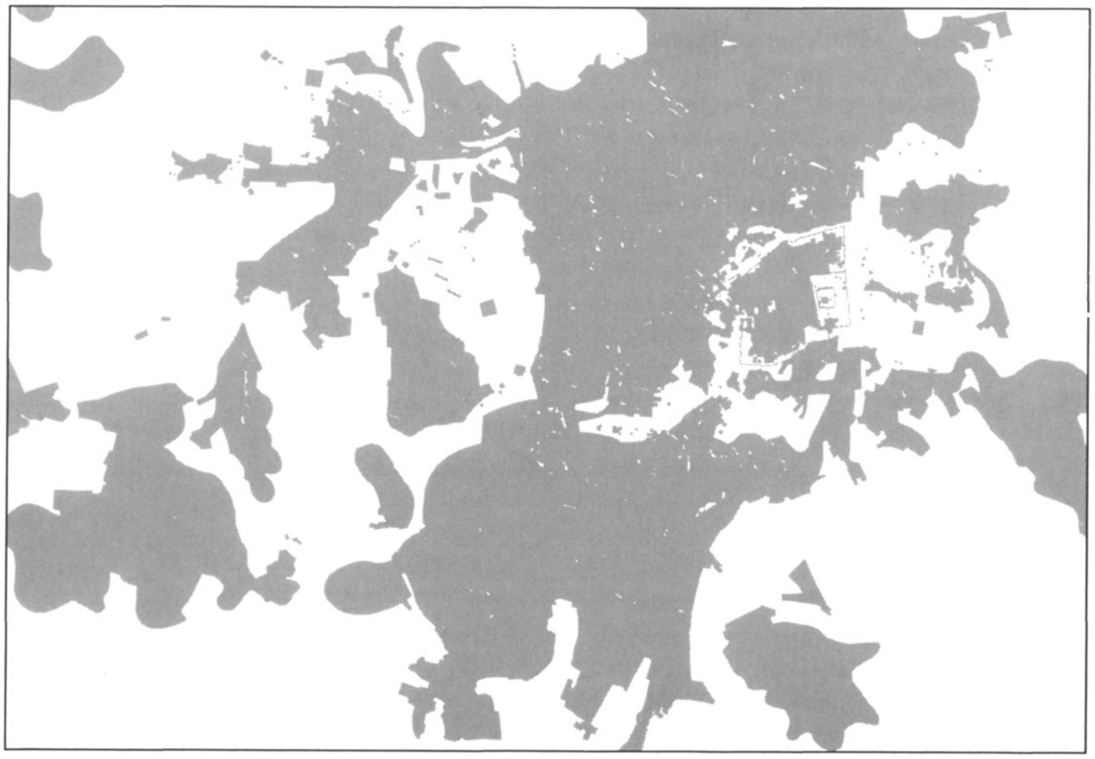

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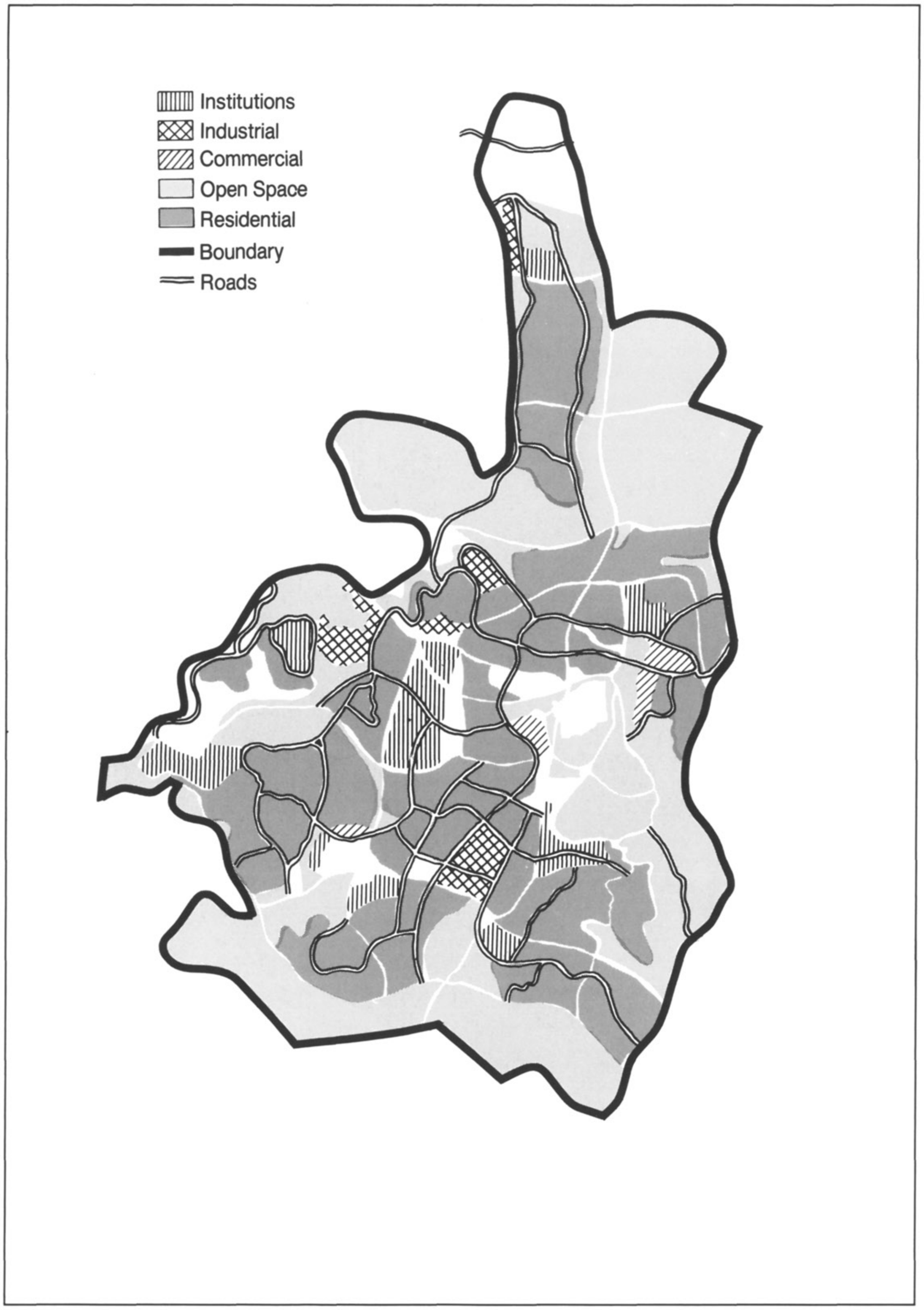
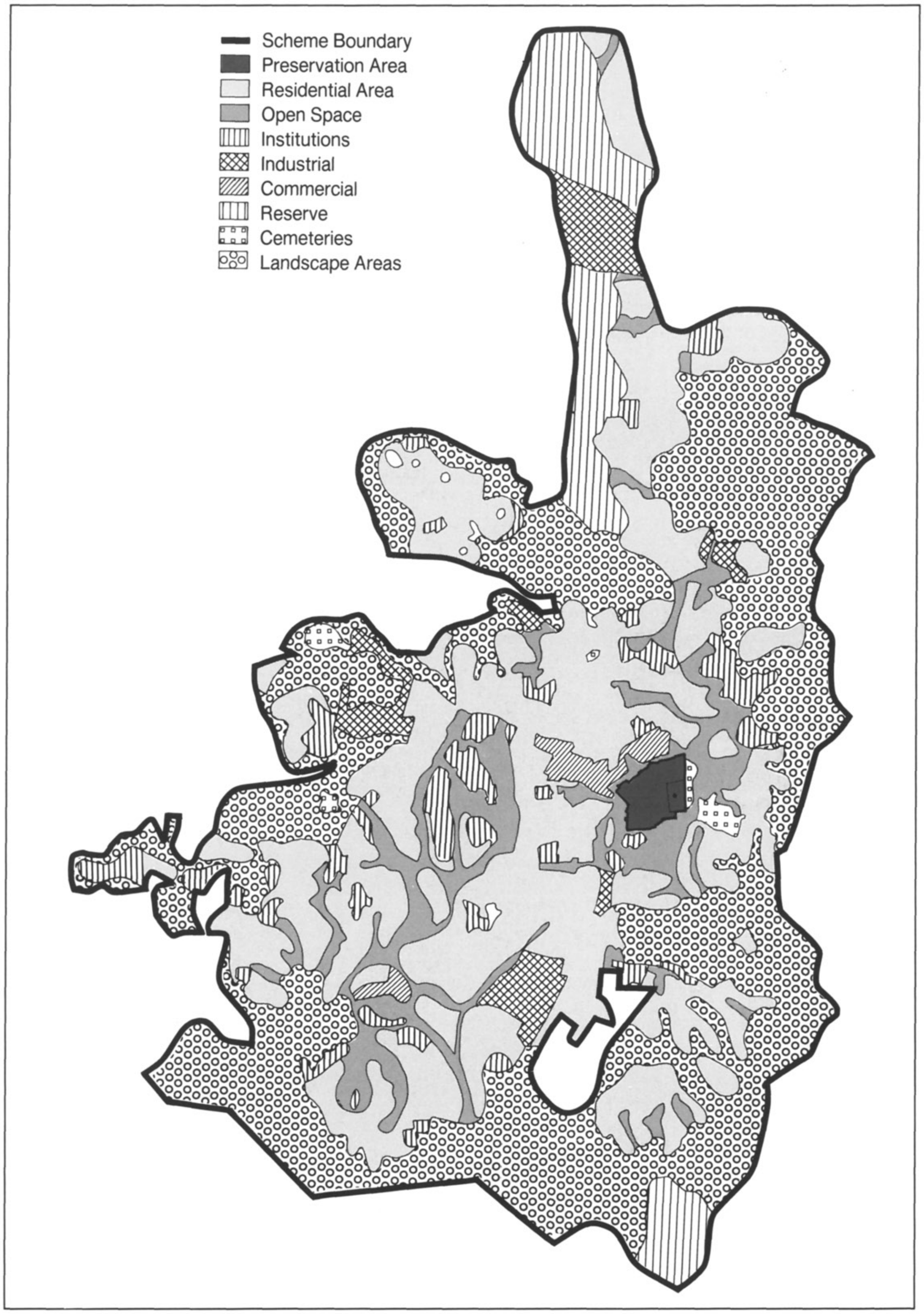


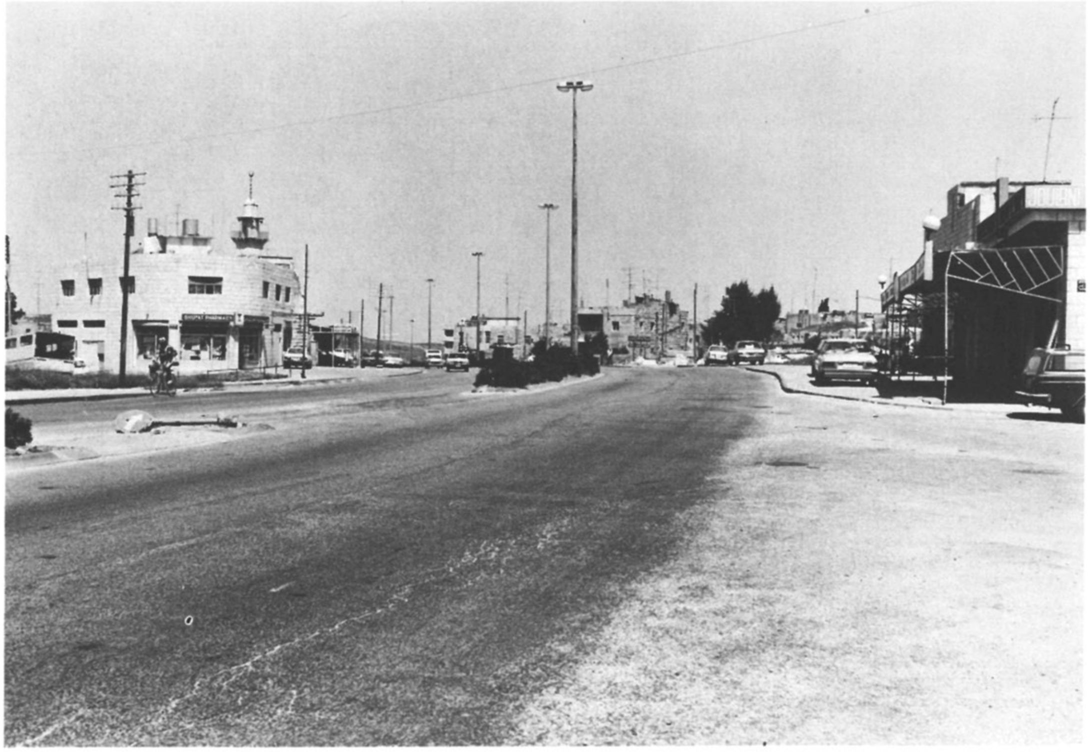
**4.12** *Jerusalem Outline Scheme of 1970.*

**4.13** *Jerusalem Outline Scheme of 1980.*

**4.13**


Scheme Boundary
Preservation Area
Residential Area
Open Space
Institutions
Industrial
Commercial
Reserve
Cemeteries
Landscape Areas

**4.14**



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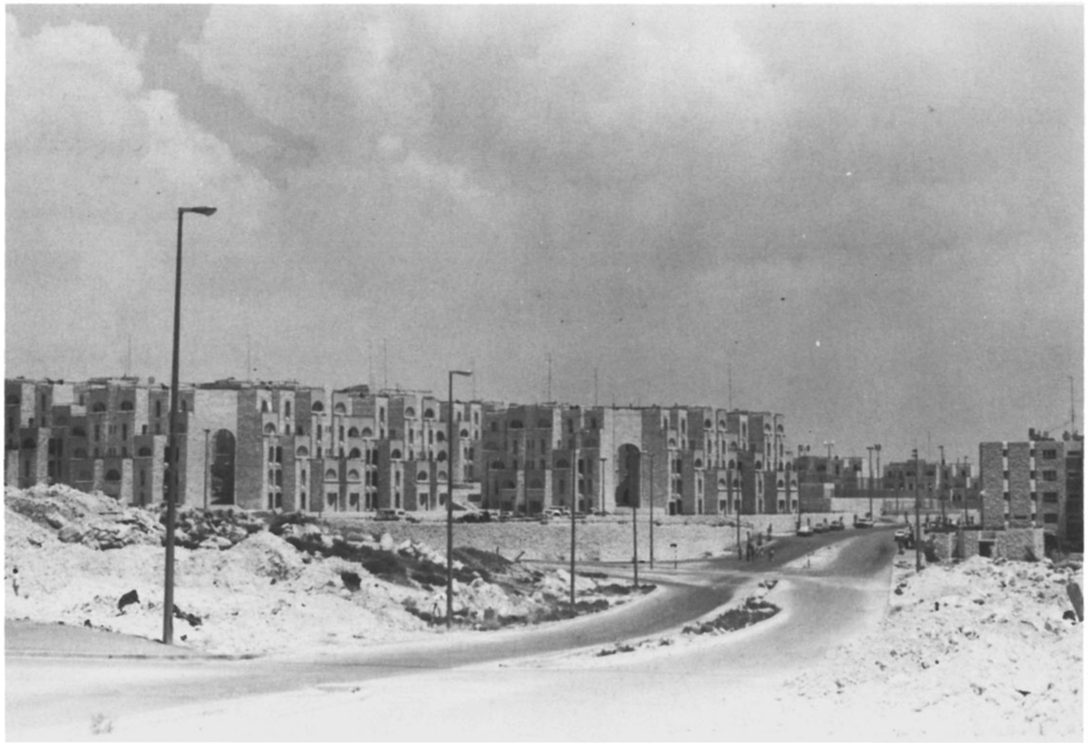

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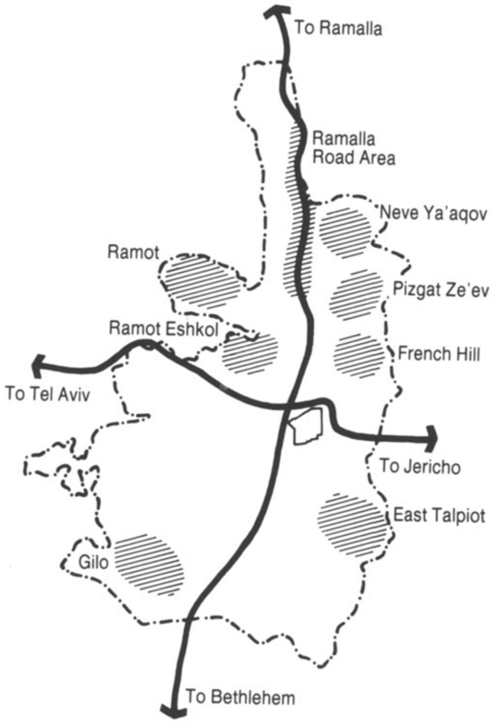


**4.14** *Ramallah Road, one of the major north–south transportation spines of Jerusalem. Since transportation improvements were introduced, it has become a prime location for Arab development within the city limits.*

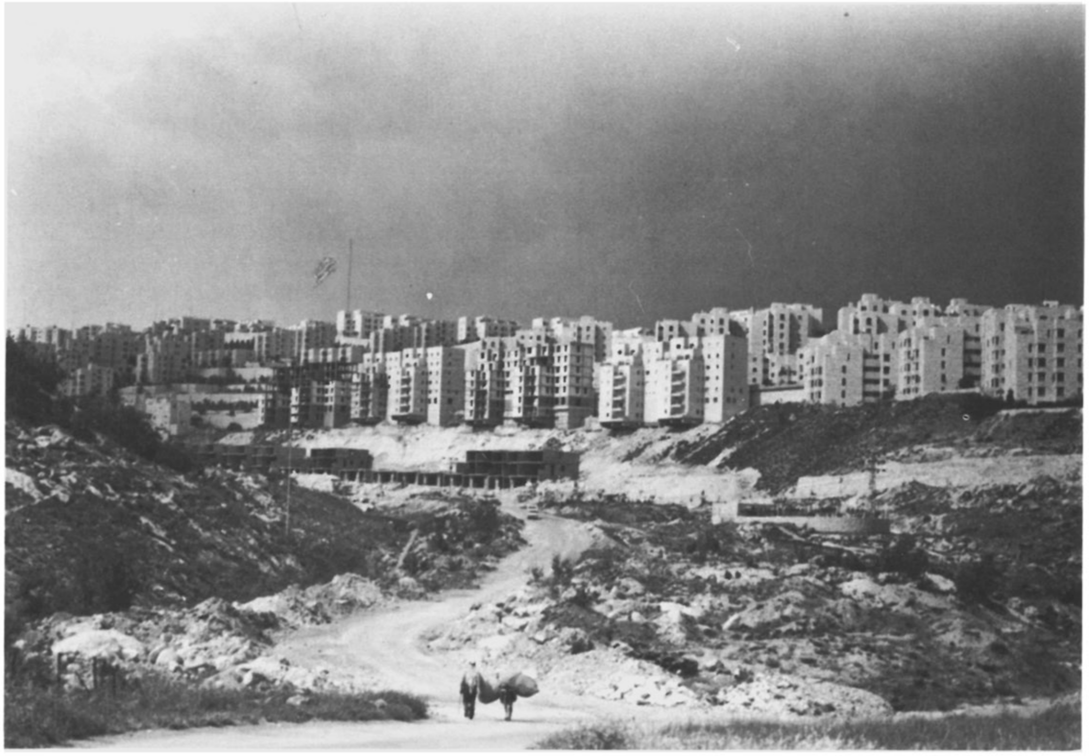
**4.15** *A housing cluster in Gilo (Hershman). Architectural motifs of gateways and arched terraces from the Old City were borrowed to create for a completely new development a sense of place and a sense of belonging.*

**4.16** *Key map locating the new neighborhoods and areas of intensive development since 1967.*

**4.17** *A city over the edge of the open landscape. Apartment building in Ramot.*

**4.18** *Sporadic rural Arab housing development. Over the ridge line, intensive housing development (Hecker) for a Jewish orthodox community in Ramot.*

**4.17**



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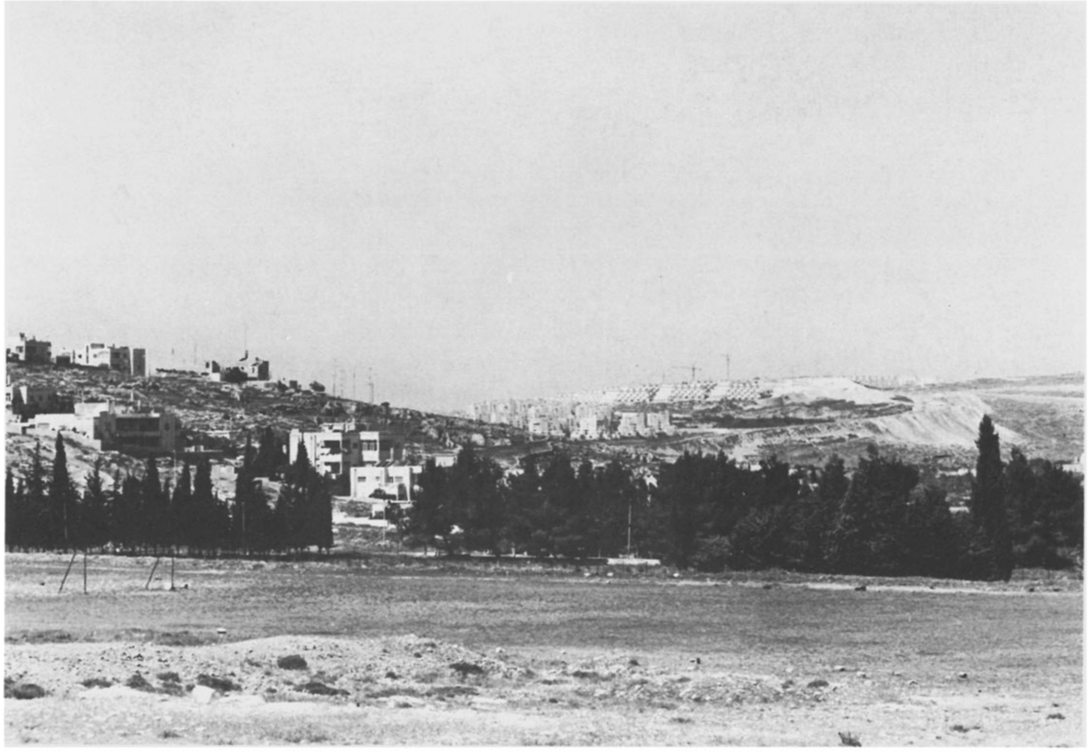

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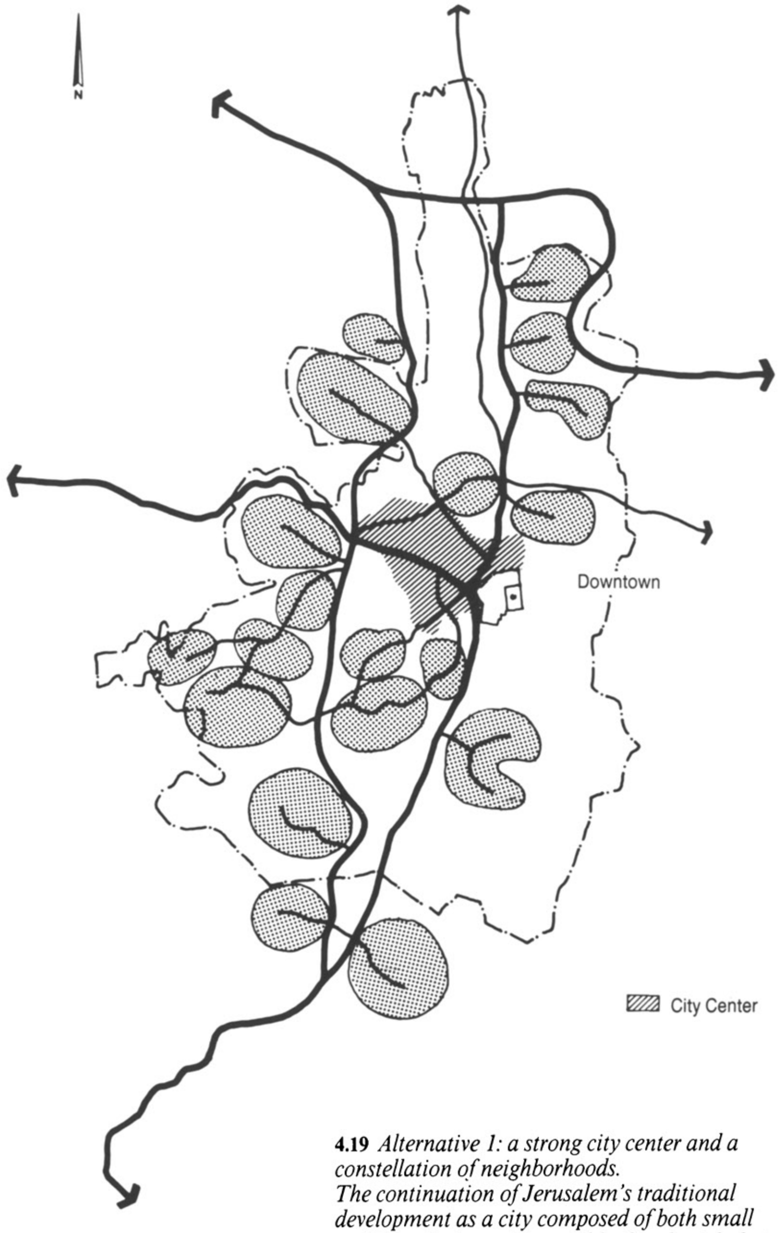

**4.19** *Alternative 1: a strong city center and a constellation of neighborhoods.*
*The continuation of Jerusalem's traditional development as a city composed of both small and large independent neighborhoods with their own centers. These neighborhoods are dependent on the city center as the principal place of employment and services. The new neighborhoods initiated by the Ministry of Housing are consistent with this settlement pattern.*

*This alternative emphasizes the topographical uniqueness of a Jerusalem built atop hills and intersected by* wadis *that are maintained as open space. The result is an interrupt pattern of clearly defined neighborhoods.*

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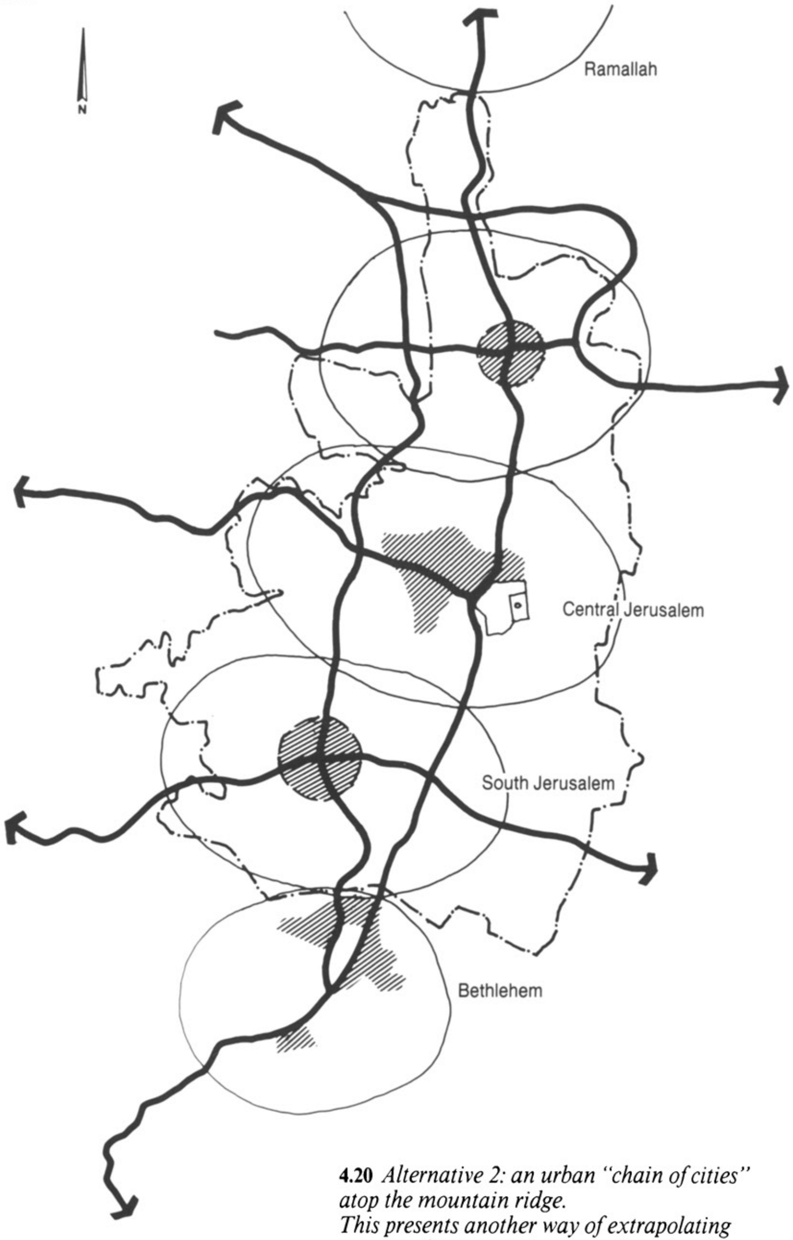

**4.20** *Alternative 2: an urban "chain of cities" atop the mountain ridge.*
*This presents another way of extrapolating patterns that now exist along the strip of the mountain ridge. Thus it would create along the main road atop the mountain strip cities of differing sizes whose natural developmental tendency would be toward the creation of an interconnected urban corridor (Hebron, Bethlehem, South Jerusalem, Central Jerusalem, North Jerusalem, El-Bireh, and Ramallah).*

*This alternative would correspond to the Outline Scheme concepts, which call for two major secondary centers outside the downtown area.*

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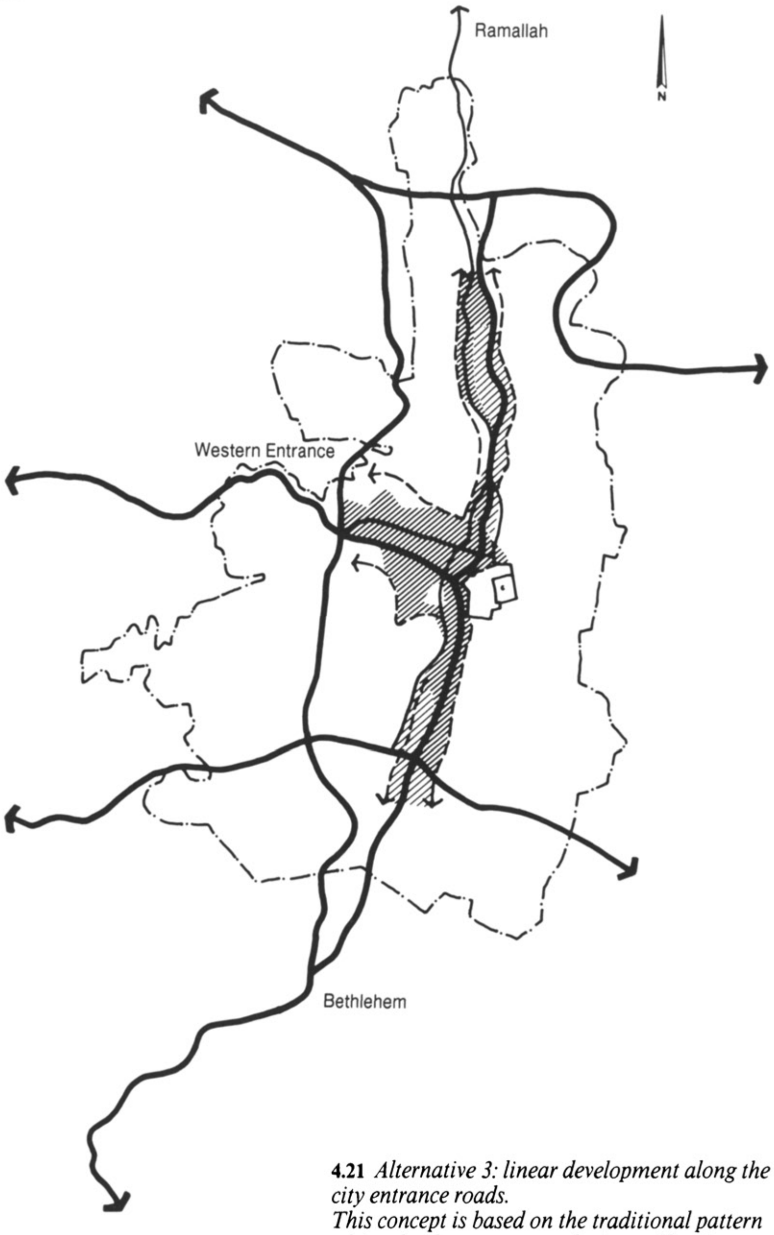

**4.21** *Alternative 3: linear development along the city entrance roads.*
*This concept is based on the traditional pattern of city development, namely, intensification along the main regional access routes leading into or out of the heart of the city.*

*Today, there are three main entrances to Jerusalem. The western entrance is a significant one at present, and the central business district is expanding in that direction. Along the southern entrance are beginnings of new development, primarily in underutilized parcels. Ramallah Road, as the present northern axis, already has some intensification of commercial uses.*

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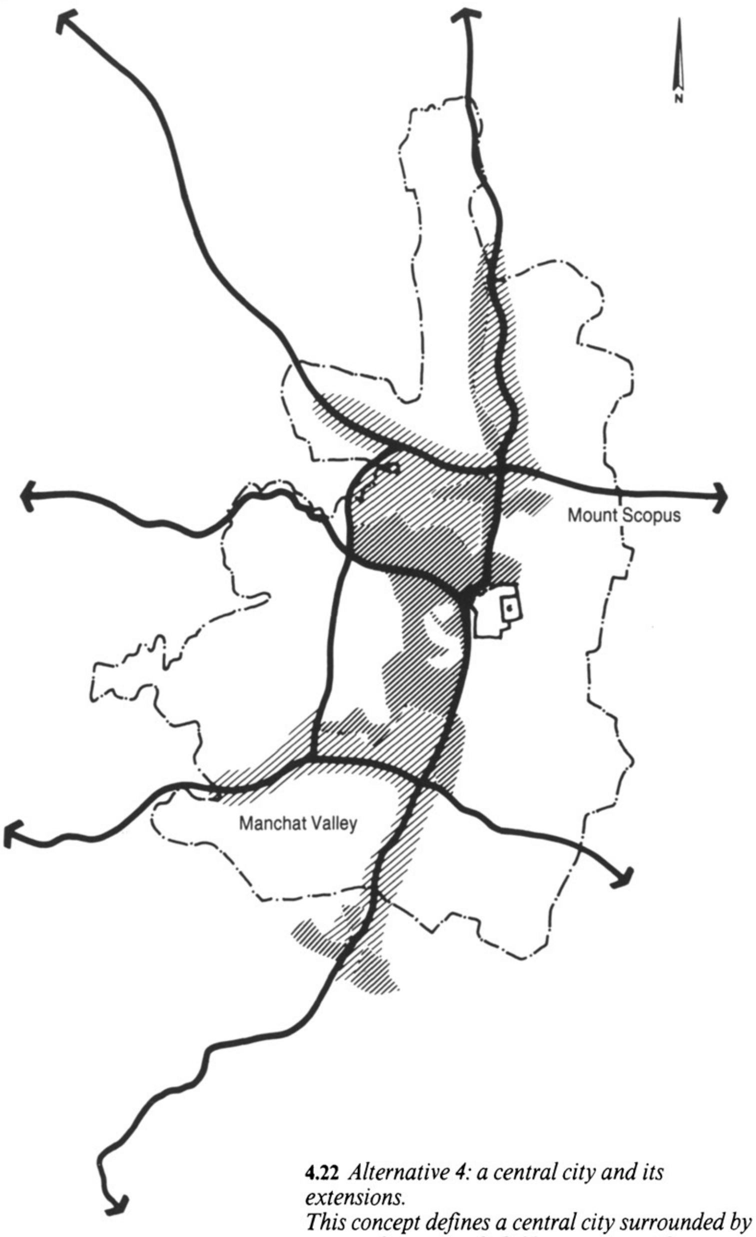

**4.22** *Alternative 4: a central city and its extensions.*
*This concept defines a central city surrounded by a ring of main roads fed by six main urban corridors.*

*In this alternative, the southern secondary center (in the Manhat Valley) and the northern secondary center (around Mount Scopus and the government precinct in Sheikh Jerah) serve as peripheral nodes to the area with intensive urban development, and out from these nodes extend the arms of linear development along the entrance axes. This is the only alternative that integrates the new neighborhood of Ramot with the organic development of the city.*

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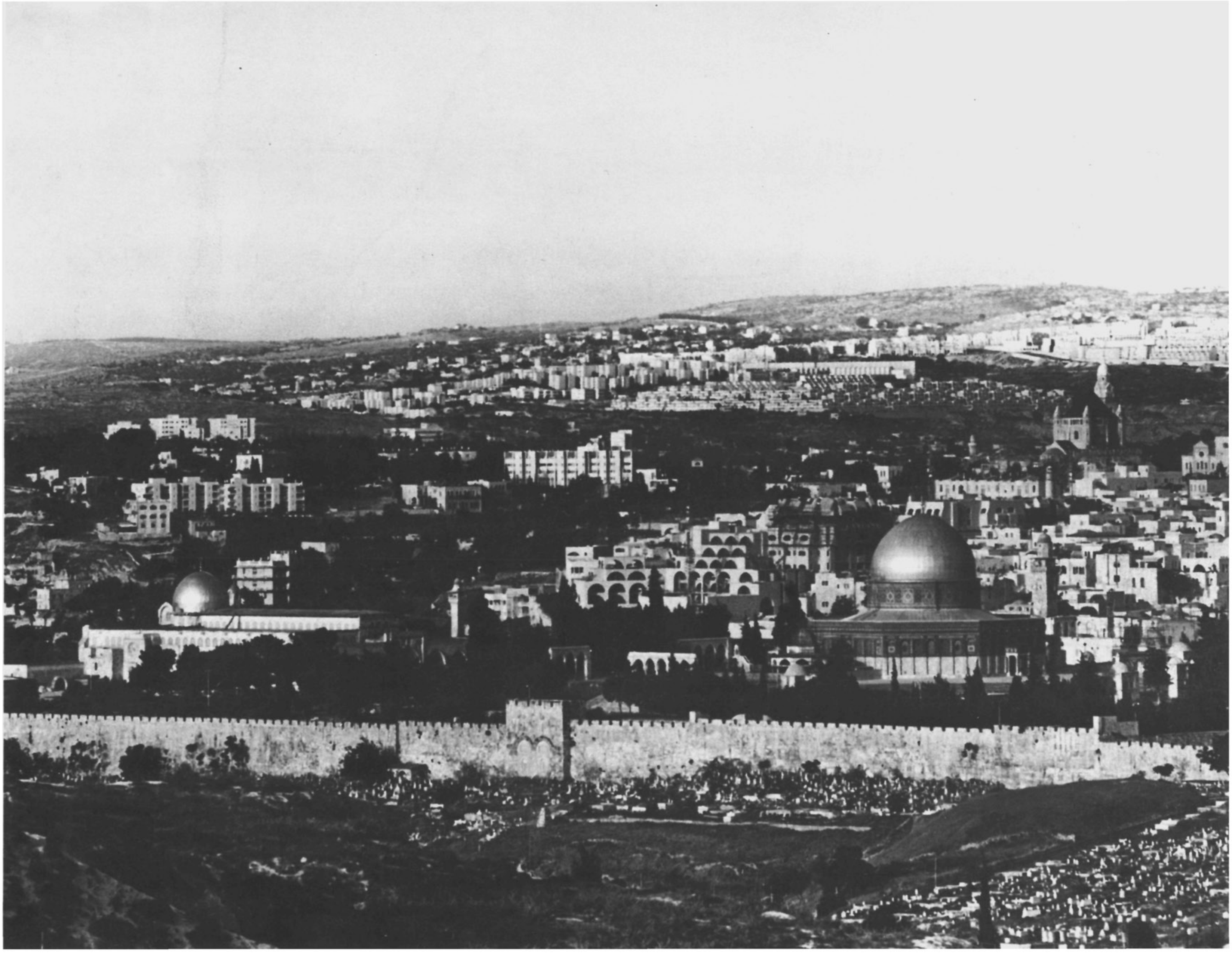

**4.23** *The new neighborhood of Gilo at the south end of Jerusalem, viewed over the Old City and the plateau of Talpiot. The image adopted by planners of Gilo was "a city sitting atop the hill."*

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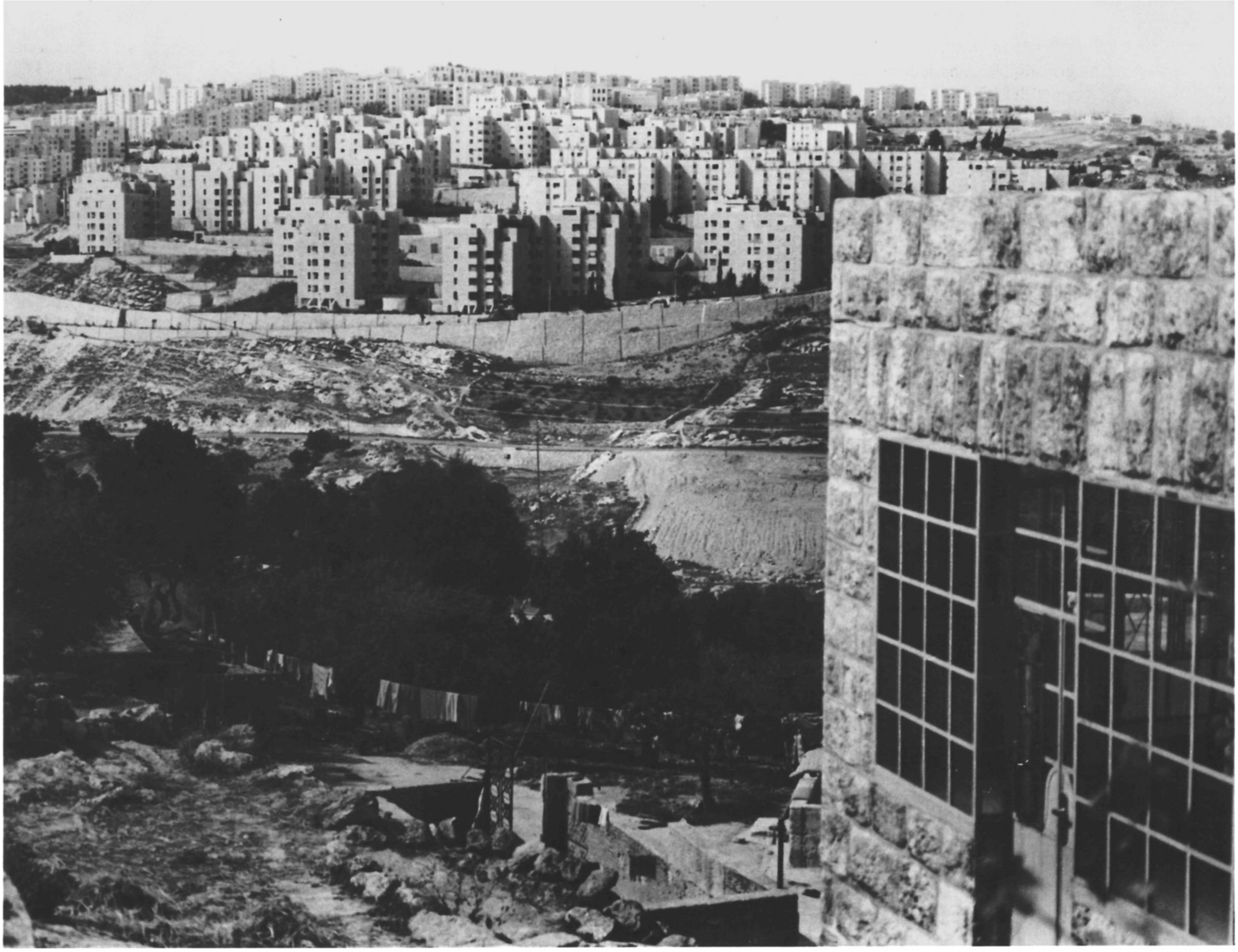

**4.24** *The new neighborhood of Talpiot East as viewed through a typical Arab single-family house. Note the extensive retaining walls required to accommodate the new housing and roads.*

## EXTENT OF URBANIZATION

The central questions facing planners were: How big should Jerusalem become? Should there be limits set on its growth? Is there a point at which the character of the city would be radically transformed as a result of its size? These questions had to be examined from two points of view: objective or natural forces acting upon the city, and government policy. And these in turn had to be assessed in terms of their impact on the physical fabric of the city's edges and the relationship of Jerusalem to surrounding cities such as Bethlehem and Ramallah.

The objective forces were affected by three factors:

1. natural growth of the population, which must be accommodated, assuming that the offspring of the residents of Jerusalem, by and large, desire to remain in the city;
2. migration into the city by residents, Israelis, and Arabs, who wish to reside there for personal reasons or for economic opportunities;
3. the job opportunities produced by the city's economy and their ability to attract residents from outside the city. (This factor was also affected by official policy.)

It has always been assumed that no government would be able to set formal limits on the city's growth or to turn away people who wanted to live in Jerusalem. Although it might be difficult at the present time to comprehend that a limit on Jerusalem's physical size would lead to such a situation, it is obviously an issue that might have to be faced within two or three decades.

Jerusalem is neither a major business nor a major industrial center; hence, a high proportion of its jobs are provided by government and public institutions. The government, therefore, has more than the normal influence on the city's growth and since 1967 has been caught in a vicious circle concerning the policies affecting the city's size. The general economic boom in Jerusalem has been primarily in building construction and tourism. Both sectors have offered job opportunities primarily to Arabs, both Israeli citizens and residents of the West Bank. Thousands of jobs have been created, attracting Arabs to Jerusalem. While some commute, others have found ways to settle within the city limits. In addition to the growth of Arab population resulting from job opportunities, the natural growth rate in the Arab sector of the city is 4 percent per year, considerably higher than that of the Jewish population.

The government has been concerned about the ratio of Arabs to Jews in the city. Its declared policy is to keep the proportion of Jews to Arabs at 3 to 1, the same ratio that prevailed in 1967 when the city was united. To balance Arab growth, the government has adopted policies aimed at increasing the Jewish population of Jerusalem — moving ministries from Tel Aviv to Jerusalem, constructing extensive housing settlements that were offered at subsidized rates to incoming families, and creating tax incentives to attract industries to Jerusalem. (This last policy has been ineffective, since those industries ended up employing more Arabs than Jews.) As a result of the policy aimed at demographic balance, the city's growth is continuously encouraged. No one has assessed the full impact of these policies on the physical fabric of the city, its relationship to surrounding towns, or the extent of the required urbanization.

The boundaries of urbanization in Jerusalem have always been of great significance to its image and character. Toward the east, the city has traditionally formed a specific, well-defined edge against the Judea Desert and along the watershed ridge of the Mount of Olives and Mount Scopus. Toward the west the edge has been somewhat more ambiguous, but where the highway from Tel Aviv enters, the edge of the city has been clear and well defined. The dispersal of new satellite towns has destroyed this well-defined edge, and the impact has been the subject of

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study of several studios under the direction of Carl Steinitz. More critically, the continuing expansion of Jerusalem threatens to destroy the separate identity of neighboring cities, particularly Bethlehem and Ramallah. For those who consider Bethlehem a place of world significance as the birthplace of Jesus, the swallowing up of Bethlehem by Jerusalem's suburbs is a disturbing prospect.

Several questions, therefore, required urgent study.

1. In what direction or directions should the growth of Jerusalem be accommodated?
2. What should the character of such new developments be, and how would the city edge be redefined against the surrounding landscape?
3. What policy might be adopted to preserve the distinct identity of neighboring cities?
4. What are the social and political consequences of the pattern of dispersal of the Arab/Jewish population? Do the proposed new neighborhoods and road system promote contact or separation between these communities?
5. Should new construction take place on hilltops, on slopes, or in valleys? Should the new residential developments be of low, medium, or high density? Should there be low-rise or high-rise buildings? How should the buildings reflect the different life-styles and the climatic, technological, and economic considerations?
6. What would be an effective scheme for the creation of open spaces in the expanding city? Should these spaces be in valleys or on hilltops and include a program of forestation? Can this open space form a continuous network through the city?

All these questions were the subject of Carl Steinitz's studios focusing on the northern, southern, and southwestern sectors of the city. Concurrently, studies were under way that focused on the city center. The group of students working under the direction of Arieh Rahamimoff accepted the Kennedy School of Government study as a launching point. That study indicated that the growth of the city center for the foreseeable future could be accommodated within the area of the existing downtown by a more intensive use of existing structures and by developing unused lands, consolidating partially developed parcels, and improving road and traffic facilities. The Kennedy School study recommended the adoption of such a policy, having determined that major secondary centers would be detrimental to the city's declared objective of unification. The study further concluded that there were substantial economic advantages to the consolidation and expansion of the center in its present location.

**4.25** *The busiest intersection in downtown Jerusalem — King George and Jaffa streets: all traffic has been stopped to allow pedestrians a safe crossing.*

**4.26** *Informal parking "arrangement" in the heart of downtown.*

**4.27** *The highway connecting the neighborhood of Ramot with the city. It is also the subject of continuous friction between ultra-orthodox and secular Jews, since the road is adjacent to an orthodox neighborhood and is used on the Sabbath.*

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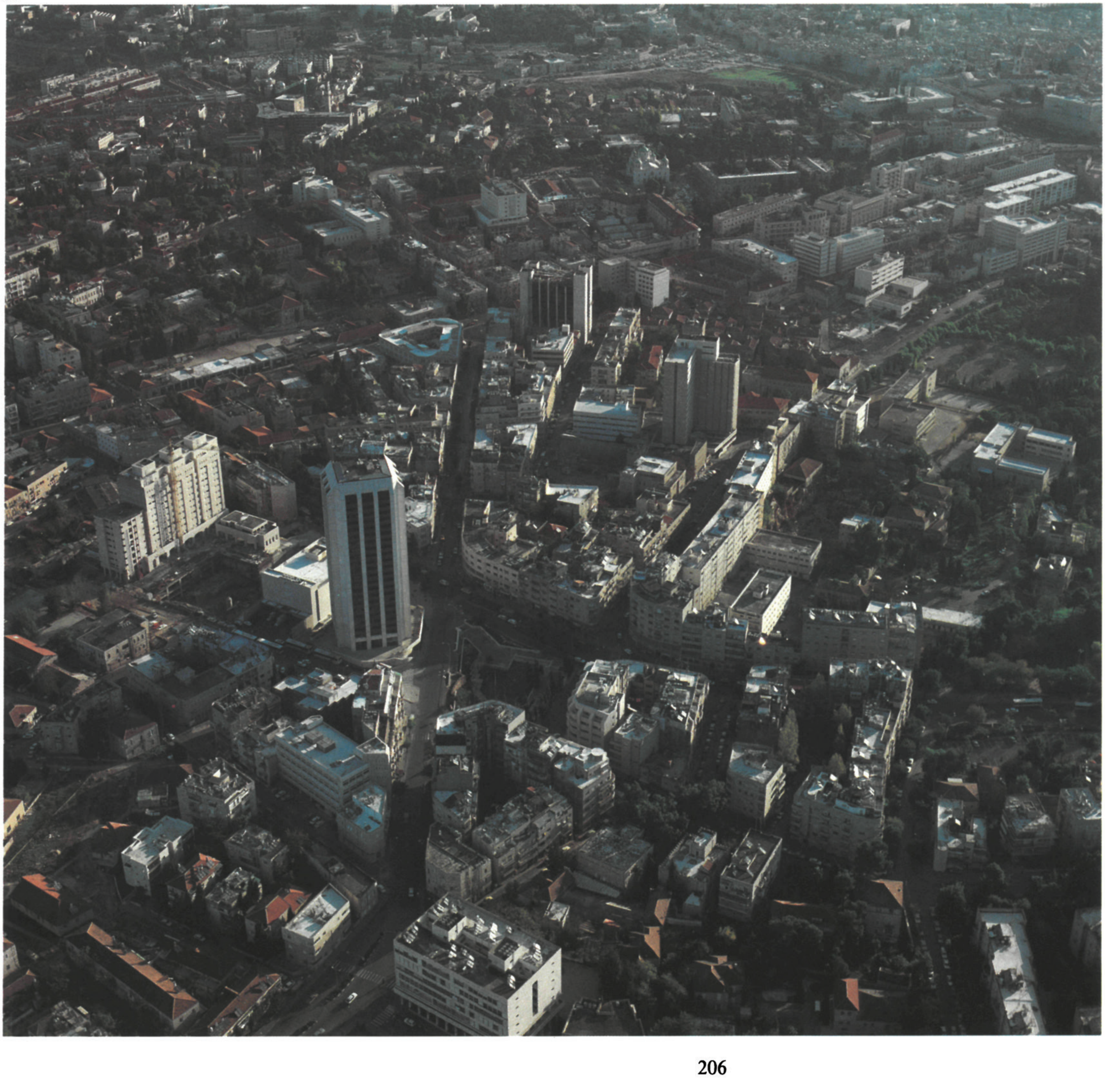

# 5 DOWNTOWN JERUSALEM

Many terms have been used to describe the heart of a city, including the vernacular "downtown" and the technical "central business district." "Downtown" means shopping, but it also means many people, the place of work, the center of administration and business. It certainly means entertainment and recreation. We think cities worthy when downtown includes theaters, museums, libraries. It is not any of these individual ingredients but a particular mixture bringing the place to life, day and night, through the seasons, that makes downtown the real heart of the city.

Capital cities often have the institutions of government as the principal edifices of downtown. Government buildings form the heart of London and Paris, Rome and Washington, Ottawa and Mexico City, but there are many places where the halls of government are isolated from the heart of the capital cities. Government buildings are in the center of Canberra and Brazilia, but in neither case can they be said to be in the heart of the city. Le Corbusier chose to place the government buildings of the capital of Punjab in Chandigarh, clearly outside the zone of urbanization. In so doing, he ignored an appropriate model, the twelfth-century Mogul capital Fater pour Sikri, where the place of government formed the geographic and pulsating heart of that capital.

A study of Jerusalem could not proceed without an appropriate discussion of what should constitute downtown. It is immediately apparent that Jerusalem's center is deprived of some basic ingredients. Many of the cultural facilities, such as the Cinematec, the Jerusalem theater, are out of the center, along the so-called cultural mile. Neither the university nor most museums are in the center. Even the Bezalel Academy of Art, previously located at the edge of the downtown, has chosen to move to the new Mount Scopus campus. While many government offices are located downtown, the bulk of the government compound, the Knesset, and most of the ministries are west of downtown; some have now been located north of the Arab business district, next to Mount Scopus. Downtown Jerusalem is therefore severely deprived: it simply does not contain elements essential to its flowering.

It is an interesting commentary on the nature of planning that this most basic question, what downtown should be and contain, is rarely discussed in official plans or by the planning agencies. Nor did it become an essential issue in the work of the studio. The *content* of downtown was simply not equal in the eyes of students and faculty to the problems of retail and commercial development, pedestrianization, the road and parking system, and the direction of growth and expansion.

Though in the past twenty-five years Jerusalem's downtown has been depleted, it is a mistake to assume that this pseudosuburbanization is irreversible. Once recognized, the pattern can be reversed. In Jerusalem, where the location of almost any major institution is subject to public determination, it becomes important to use that muscle to cause change. For instance, Bezalel Academy's need for more space could have been satisfied in Mamilla, which would have kept the institution downtown and away from the isolation of Mount Scopus. In the future, new museums, theaters, concert halls, public libraries, and whatever else might emerge could be located in such strategic sites as Damascus Gate, the Russian compound, Mamilla, and the Allenby compound so that the downtown may acquire over the years not just the appropriate "plumbing" of roads and parking or the "body" of retail shops, but the soul of a great capital city.

5.1 *Aerial view of the center city looking east. Prominent features include the Old City, Damascus triangle, and the Russian compound in the upper right; Ben-Yehuda shopping area in the center. The triangle is behind the high-rise building left of center.*

In recent years there has been great emphasis on retailing as the key ingredient for a vital downtown. Most corrective action to bring to life abandoned downtowns in the United States has centered around the creation of new retail complexes. Noting the success of the great suburban malls, planners have tried to import them into the center city. Often the form is identical, with the exception that the acres of surface parking are replaced by structured parking because of the high cost of land. This strategy fails to recognize one of the great weaknesses of suburban malls: the isolation of retailing from the array of other urban activities results in a limited and sterile experience.

The downtown malls often perpetuate and intensify this weakness by turning their backs to the surrounding city streets, which is much more serious than doing so to surrounding fields or single-family tracks in the suburbs. The concept of separation and introversion can be seen in Copley Place in Boston. The presence of the neighboring great Boston Public Library, the theater district, and the music center offered a real opportunity for connection and for an alternative to the suburban mall. Despite constant declarations by the Boston Planning Authorities that the integration of Copley Place with the city and surrounding communities was their objective, the opportunity was missed. So powerful are the development forces and the notions about what constitutes a safe financial investment that the forces of introversion prevailed.

One cannot help but feel the impact of these strategies on the work by the students. Their designs transcend the developers' strategy by making sure they are carefully interwoven with surrounding streets, but fall short of challenging the basic program of predominantly retail and office uses as the center of downtown life. Thus the idea that part of the remedy for downtown's illness is to change the program and challenge the policies fails to come through.

It is interesting to speculate where the Knesset and the government compound might have been located had the city not been divided between 1948 and 1967. It is obvious that with the Israeli sector cut off from the Old City and its visual basin, there was no choice but to place the government compound to the west. Even the concern for safety and security prompted placing the Knesset as far as possible from snipers' bullets. But *what if*, as the phrase goes, this had not been the situation in 1948, and Jerusalem's planners could have searched the entire city for the best location for the government center? Would they have adopted the Corbusian plan, which distances government from the people by creating an isolated compound reached

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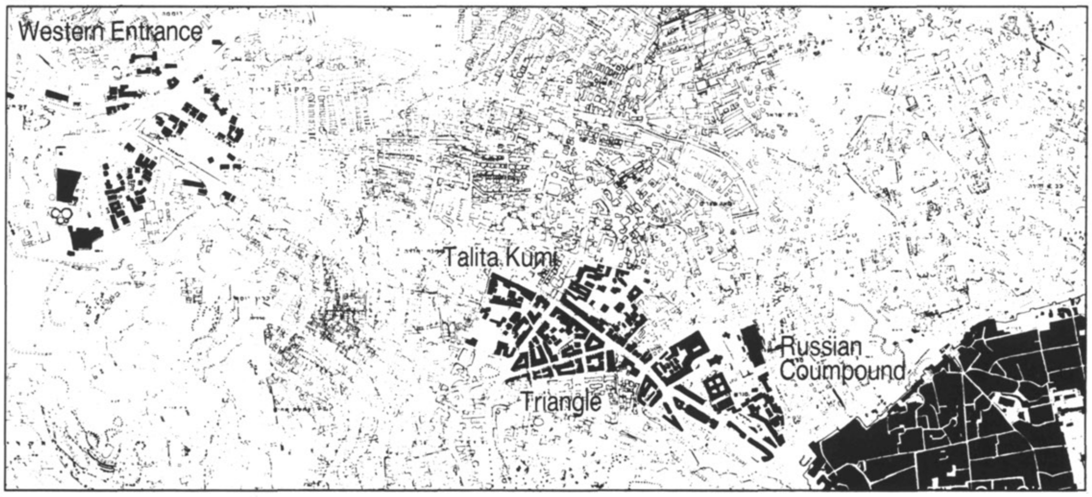

**5.2** *Locational diagram of the center city.*

**5.3** *The intersection of Jaffa and King George V streets, 1983.*

**5.4** *The intersection of Ben-Yehuda and King George V streets, 1924.*

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by formal processional avenues; or would they have adopted the medieval or Muslim concept of integrating government in the city, which we see so vividly in Fater pour Sikri or Italy's medieval cities?

The question is worth considering because it is the only measure of the concept of the place of government in the capital. What would the options have been? The Old City itself could not have accommodated the size and scale nor the service requirements. Choosing Mount Scopus, the Mount of Olives, or Abu Tor would have resulted in a citadel of government, similar to the fortress-like campus of the newly constructed Hebrew University. It would have visually linked government to the Old City, but a sight-line connection between the places of worship, tradition, and *governance* would not have placed government in the midst of the people! Damascus Gate, Mamilla, even Independence Park would have been radical alternatives that placed government in the city streets as the Doge Palace sits in the heart of the Piazza San Marco in Venice. The planners of 1948 would certainly have shied away from such a move and would have opted for a citadel overlooking the Old City. The more profound question as to which is more appropriate and would have served the people best remains a central issue of urbanism today.

Downtown Jerusalem stretches westward along Jaffa Road from city hall near the city walls to the central bus station, the Hilton Hotel, and the convention center at the beginning of the Tel Aviv highway. In the middle of this line is the "triangle," the heart of downtown, defined by Jaffa, King George, and Ben-Yehuda streets. Ben-Yehuda, which slopes rather steeply from King George to Jaffa Road, meeting it at Zion Square, has recently been closed to traffic and made into a pedestrian mall.

Much of downtown resembles the commercial center of a minor Mediterranean city. Long rows of one-story shops occupy precious frontage along principal streets. Elsewhere, three- and four-story apartments, built in the 1930s, are now occupied by shops on the ground floor and private and government offices on the upper floors. Here and there new structures, including three twenty-story towers, rise out of the generally dilapidated fabric. There is considerable congestion and inadequate parking. Jaffa Road itself serves as a continuous bus station, as all lines converging on downtown fill the entire street with buses.

These conditions have been made all the more difficult by the continuing growth and resulting pressures on the area. Specifically, between 1968 and 1980 the number of tourists more than doubled (from 969,400 to 2,394,000), creating pressure from more hotels and more service facilities. While this was an important factor in the historic areas, it was also being felt downtown. During the same period, the population of the city grew by 165,000 people. With the rising standard of living and increase in purchasing power, the demand for more retail facilities was extensive. The general expansion of the economy also created a demand for office space. In the absence of alternatives, office users began moving into surrounding residential neighborhoods. This thrust into the surrounding neighborhoods has had a very damaging impact upon them.

The work of the studio attempted to address these issues and to demonstrate that within the geographic area of downtown, the needs of the growing city could be satisfied. A series of independent, diverse projects demonstrated that the downtown could respond to the growth and could be improved in character and image. Some projects were for parcels of land; others demonstrated the possibilities for rehabilitating and reconstructing dilapidated or poorly used areas. Others looked at the pedestrianization of sections of the downtown and at policies to improve circulation. Another group examined the entrances to downtown, particularly the principal entrance from Tel Aviv. Finally, two groups examined the policies as they would affect the relationship of the commercial area to the Old City. The studio divided the downtown geographically, so that the combined efforts of the various teams yielded a comprehensive proposal for the entire area.

## OVERALL POLICIES

The study carried out by the Kennedy School of Government workshop under the direction of Jim Brown and Jose Gomez-Ibanez demonstrated that land and building reserves in the downtown can accommodate requirements for the coming decades. Nevertheless, it was not clear whether the thrust of such a development should be eastward in the direction of city hall, the Russian compound, the Mamilla area, and Damascus Gate — a kind of a pincer movement, a crescent of development beginning at Damascus Gate and swinging around toward Jaffa Gate. The alternative was to leave Mamilla and Damascus Gate relatively undeveloped and direct future growth beyond the newly constructed Clal Center. The student team of Lew Bremenstul and Henry White offered a plan favoring development close to the Old City, while Carlos L. Atienza explored the consequences of the westward expansion.

The schemes gave physical expression to two divergent policies in Jerusalem. One faction, led by the mayor, favored intensive development in the direction of the Old City and hence the development of Mamilla, the Russian compound, and Damascus Gate. Planners in the Ministry of the Interior favored distancing development from the Old City and pushing it toward the Tel Aviv entrance.

A scheme by Bremenstul and White demonstrated that there were land reserves of greater consequence within the Old City basin. Both Mamilla and the Damascus Gate area offered development opportunities that could be complemented by redevelopment of the Russian compound. Furthermore, development toward the east offered greater vehicular access from the newly constructed neighborhoods. Route 1, a north–south artery coming from Ramallah and the northern neighborhoods into Damascus Gate, and King David Street, coming from Bethlehem, were effective routes. Access from the west, however, was difficult as it had to traverse most of the existing downtown.

The westward development could be served by the proposed highway number 4, which would come from the north through Ramot and continue to Gilo in the south. Access from the Tel Aviv direction and western suburbs was good, but access to this area from the Arab neighborhoods of the city was extremely difficult as it had to traverse the congested downtown.

A fundamental difference between the two proposals clearly emerged. The eastern center would serve effectively both the Jewish and Arab populations of the city and would place the center close to the major pilgrim and tourist attractions in Jerusalem. It would therefore become a meeting ground for the entire population. Its natural expansion would eventually link the Arab and Israeli business districts, creating a single center. The western expansion, however, would almost certainly become an exclusively Israeli–Jewish center. Distance from the Arab business district would be too great to bridge. This policy would therefore lead to greater segregation in the commercial life of the Arab and Israeli communities.

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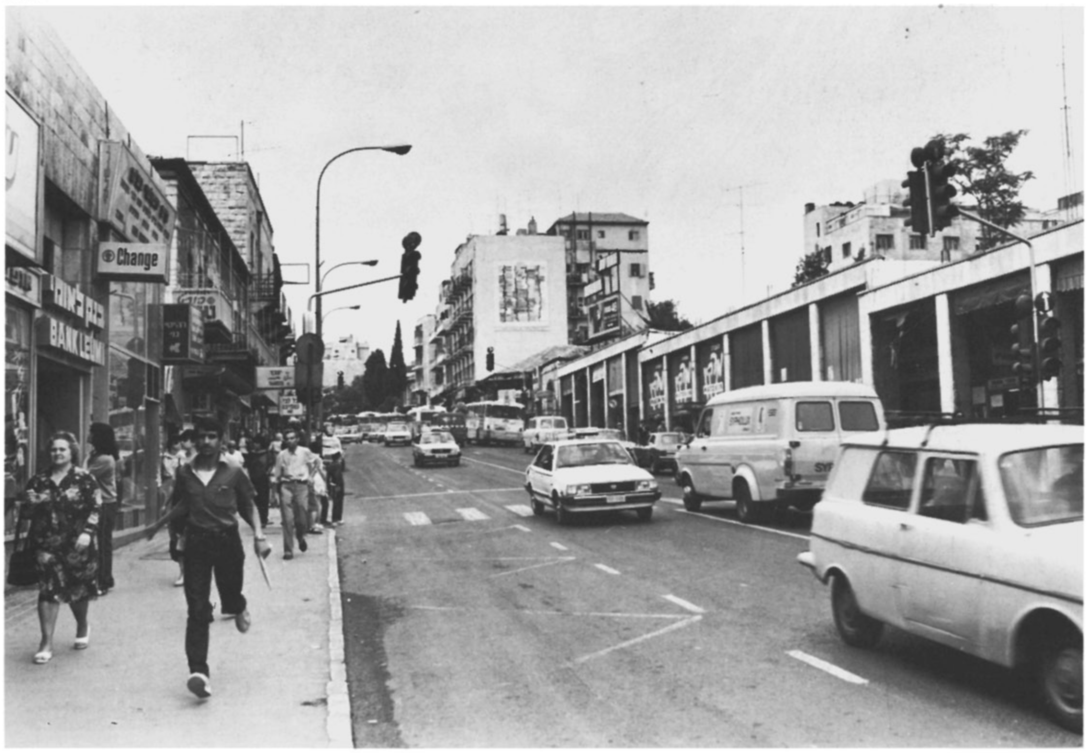

**5.5** *Traffic in the center city. Concentration of activities in the center city means that a turn-of-the-century road system must undergo changes to better move people and goods.*

**5.6** *New shopping center along Jaffa Road behind what used to be a typical residential area of Jerusalem. The center city as a place to live is rapidly being eroded by the quality and design of recent office and hotel towers.*

**5.7** *The intersection of Ben-Yehuda and King George V streets. The office building in the center replaced the old Tolita Kumi orphanage and hospital.*

**5.8** *Eylon Tower. In the center, as development continues to concentrate in the areas, the physical relationship between the old and new urban fabrics has yet to be resolved.*

**5.9** *Shopping at Mahaneh Yehuda markets.*

**5.10** *Teenagers hanging out in the core area.*

**5.11** *Although recognized as Jerusalem's main street, Jaffa Road has neither the appearance nor the architectural qualities to support such a title.*

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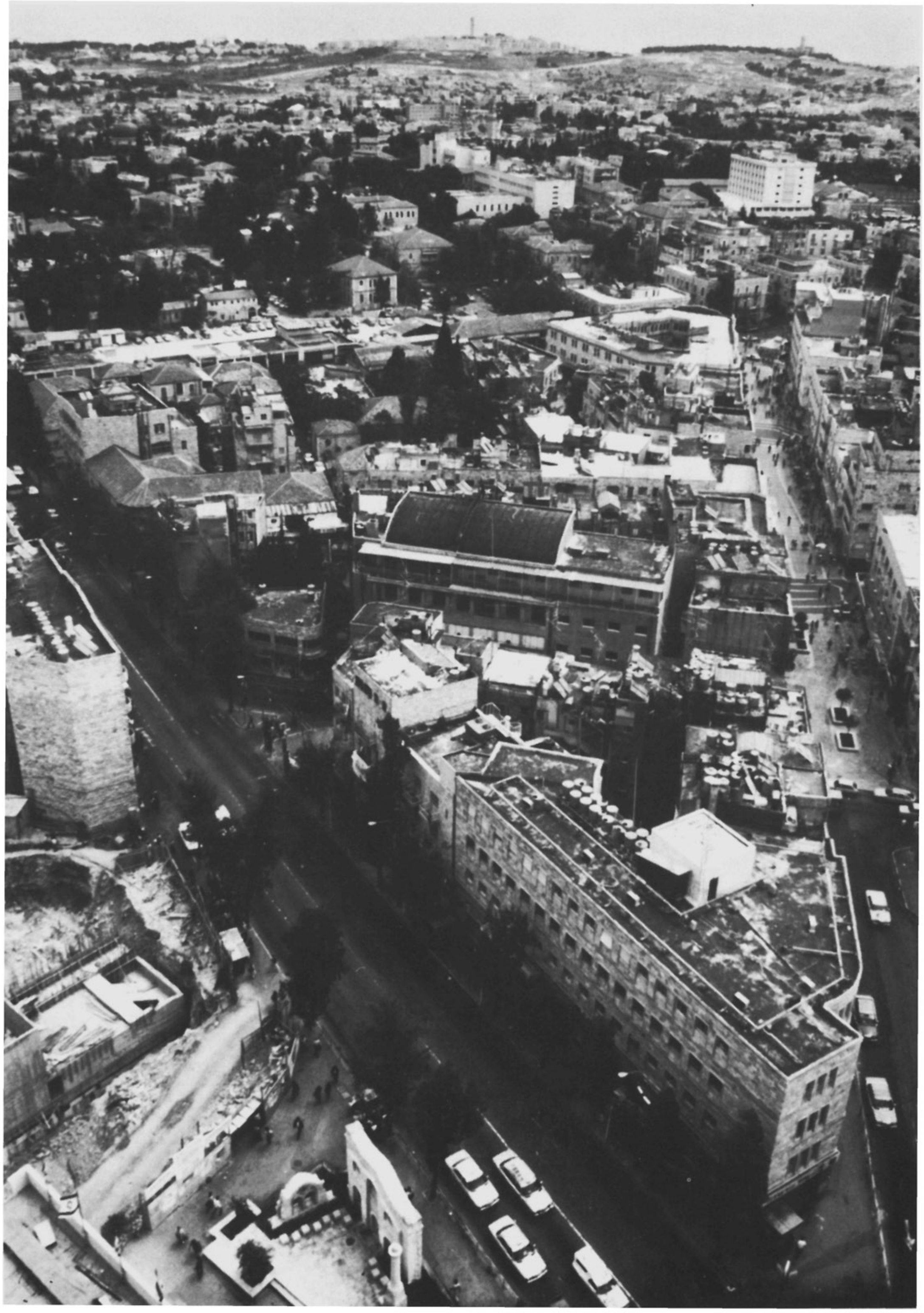

**5.12** *The core of the center city is the triangle bounded by the city's three major commercial streets — Ben-Yehuda Street (right), Jaffa Road (top), and King George V Street (lower left).*

**5.13** *Alternatives for both dispersed and concentrated future growth.*

**5.14** *The relationship of the center city to the region.*

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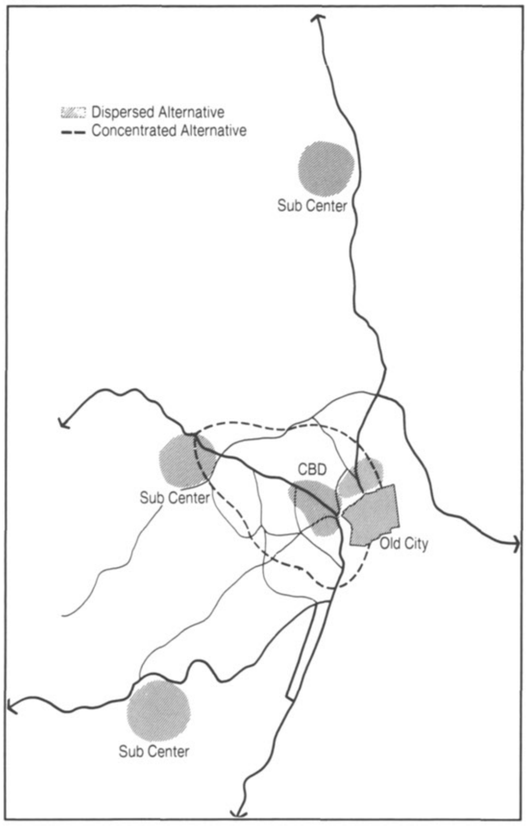
▨ Dispersed Alternative
– – Concentrated Alternative
Sub Center
Sub Center
CBD
Old City
Sub Center

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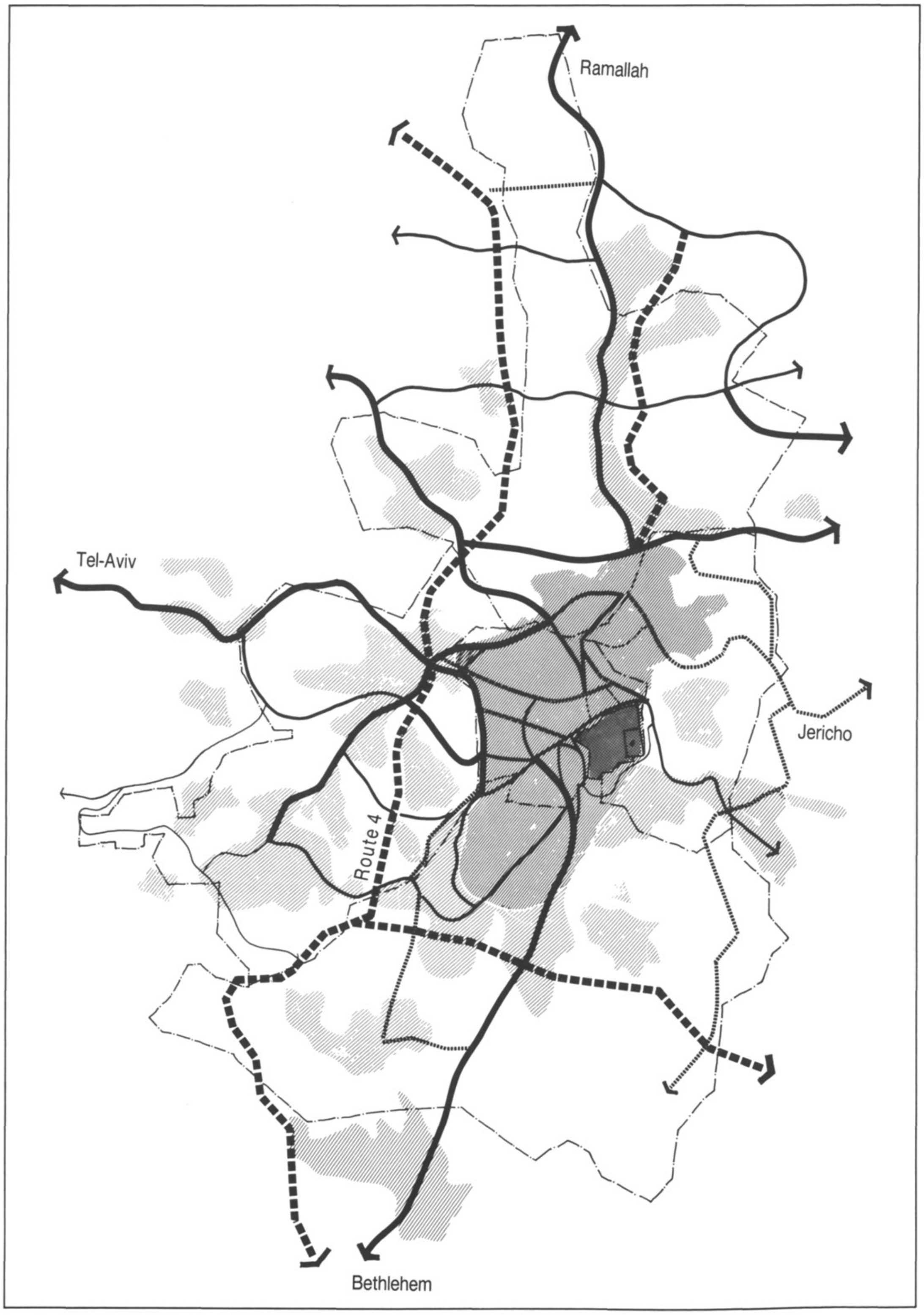
Ramallah
Tel-Aviv
Jericho
Route 4
Bethlehem

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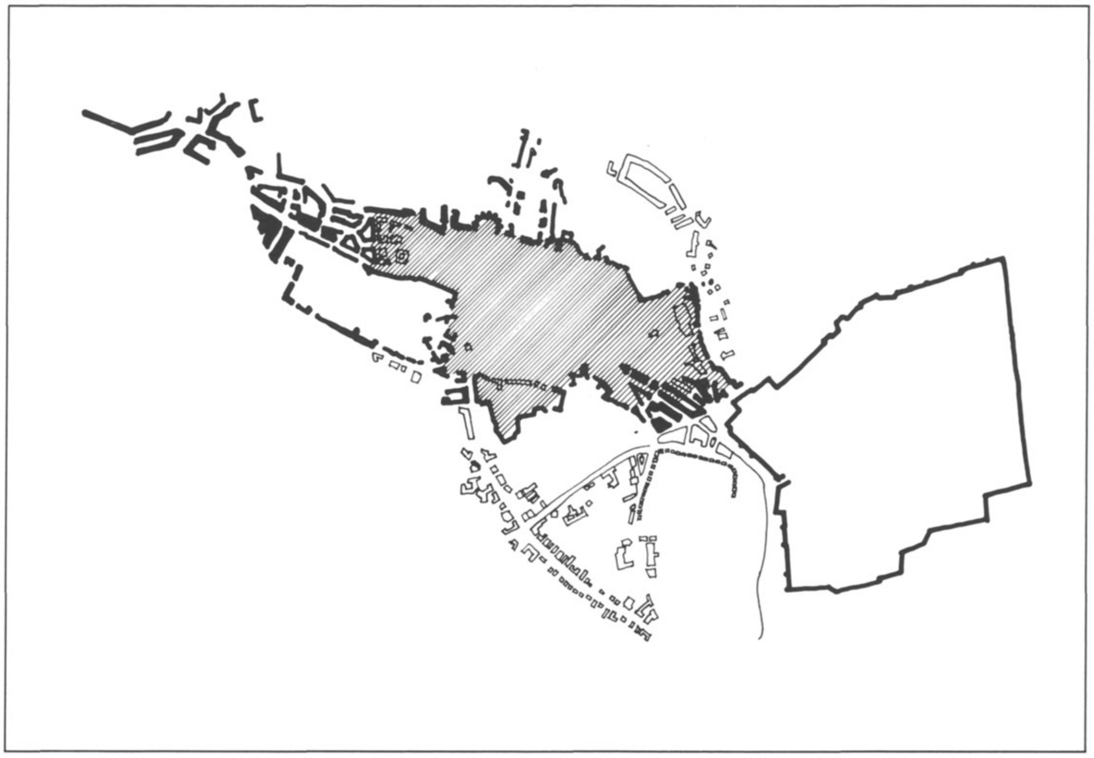

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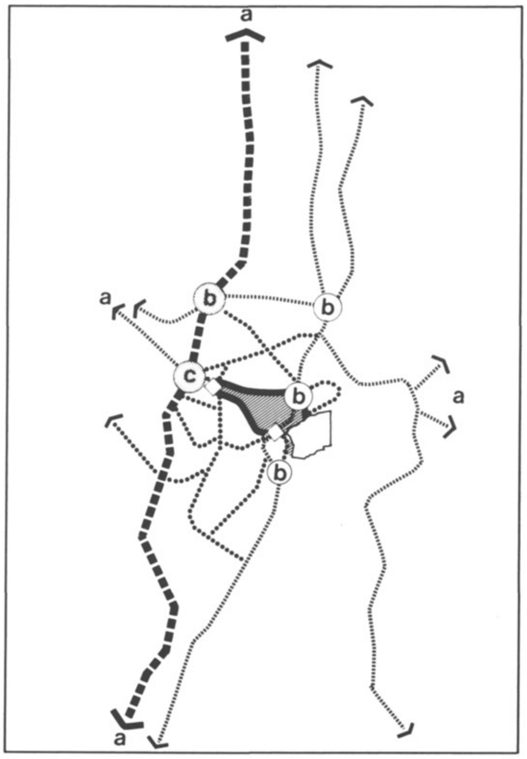

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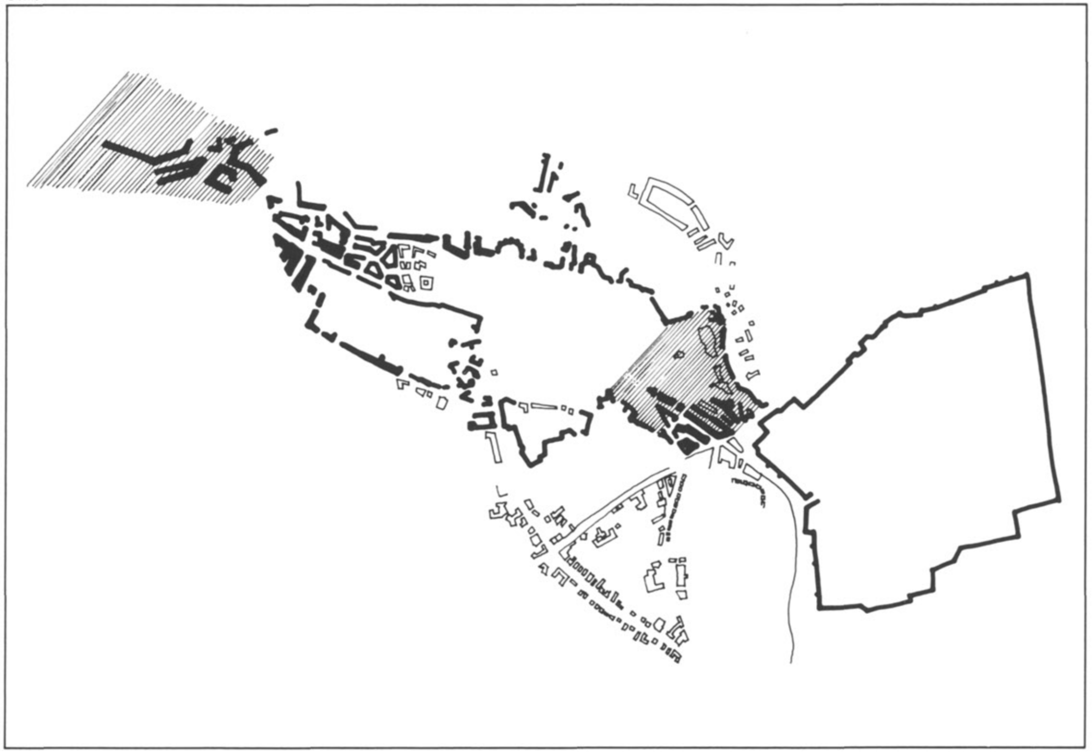

**5.15** *The majority of the new space in the central area will be directed to the crescent area close to the Old City at its northwest corner. A secondary center, accommodating public and commercial activities, will be located at the western entrance to the city in the vicinity of the junction of Route 4 and Jaffa Road (White, Bremenstul).*

**5.16** *The majority of the new development will be directed to the western entrance. Any other construction at the eastern end of Jaffa Road and in the vicinity of the Old City will be limited to occasional infill and to preservation and local improvements to the historic character of the existing fabric (Lopez-Atienza).*

**5.17** *a. The four historic roads from north, south, east, and west continue to form the main approaches to the central area and the Old City. b. Public and commercial activities are located at central points on these roads and serve both adjacent neighborhoods and the continuous linear development along the road. These centers of local character will supply immediate services and thus will alleviate the traffic pressure on the central area and the Old City. c. The major link between the northern and southern regions will bypass the central area from the west (as proposed by the municipality) and will create a new center of commercial and public activities at the western entrance.*

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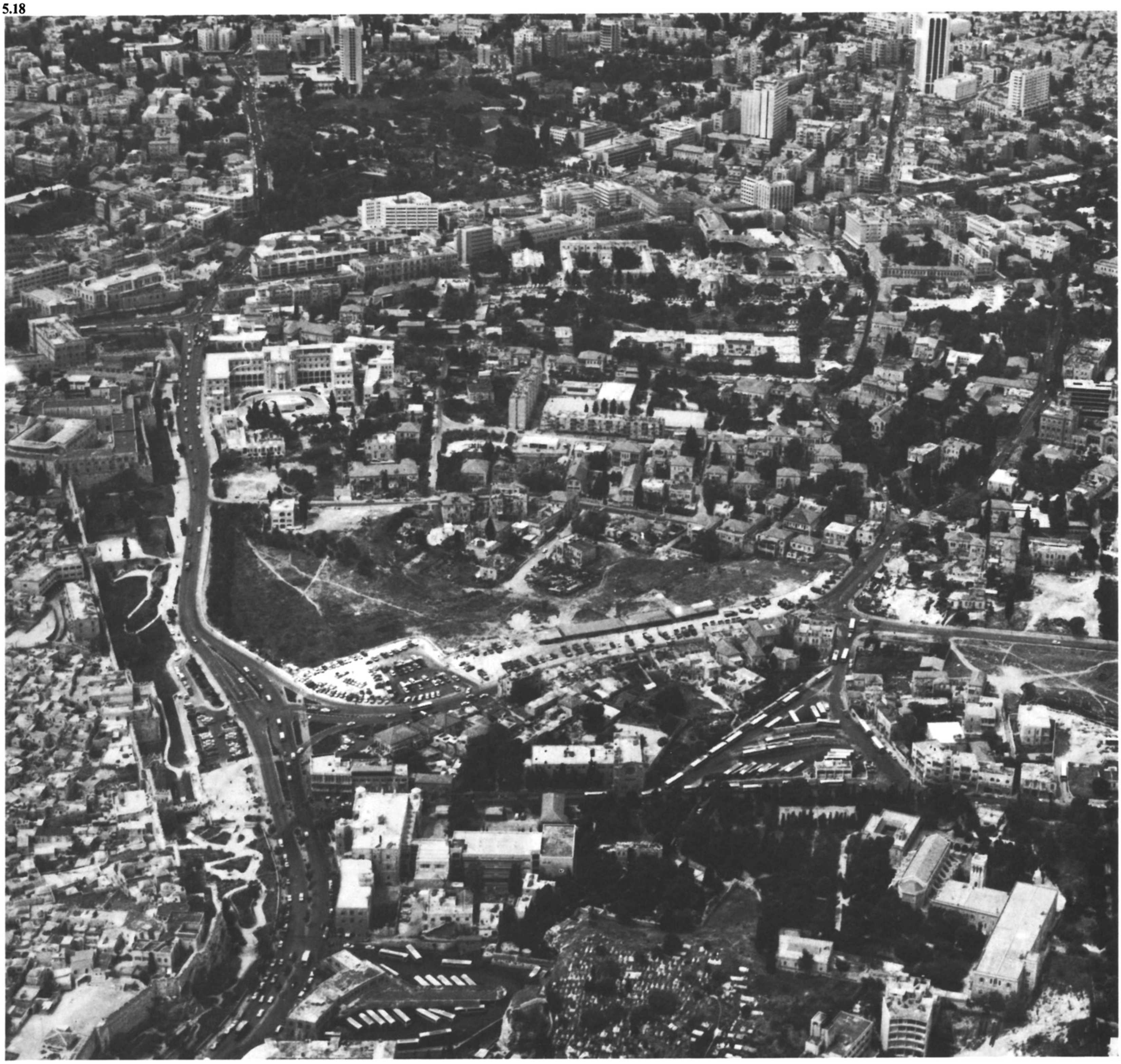

## THE RUSSIAN COMPOUND

The pivotal parcel in downtown's development is the Russian compound. Constructed in the nineteenth century, it houses the principal church, hospital, and hostels of the White Russian orthodox community. The church, with its beige limestone walls and domed green copper roof, sits in the center of the compound. Immediately adjacent to it is Daniel Oster Square (better known as Oster Park) and city hall, built by the British mandate in 1930. With the creation of the state of Israel in 1948, the compound became a government center as well, with the inclusion of the Jerusalem police station and jail, the Ministry of Religious Affairs, and other government offices.

Perhaps by default, the Russian compound has also come to be one of the major parking reservoirs of the downtown. Practically its entire unbuilt surface is covered with hundreds of cars through the daylight hours. Parking accommodates civil servants, people coming to the government offices, and general parking for the adjacent downtown retail areas.

Plans for the redevelopment of the Russian compound have been underway since the 1960s. One decision was to locate the city municipal government facilities on that site as well as some government offices. A competition, won by the Haifa-based architect Alfred Mansfeld, proposed a series of high-rise towers, sixteen to twenty-two stories high, and an observation tower 120 meters high. These office buildings span between large pylons in a manner similar to the project by Kenzo Tange in Tokyo, and rise thirty meters above the Russian church and the nineteenth-century buildings. The original Mansfeld plan proposed the demolition of all nineteenth-century buildings except for the church, which was to remain overshadowed by the office building.

Through the 1960s, Jerusalem zoning ordinances did not limit the height of buildings. Several high-rise structures were given building permits. The Rasco Tower, the Hilton Hotel, the Plaza Hotel, Migdal Hair, and the Clal Centers were all constructed in the 1970s with permits granted by the municipality in the late 1960s. By 1976 the attitude toward tall buildings had changed. The realized high-rise towers were severely criticized and recognized as inappropriate for Jerusalem. At the recommendation of the city planning department, new guidelines were adopted, restricting building height in Jerusalem to eight stories. These guidelines were accepted by the students as they reexamined the Russian compound.

Three teams of students proposed designs for the compound. In each case, they attempted to fuse the compound with its surroundings, to define its role within the downtown, to accommodate in its construction the urgently needed parking, and to provide space for the municipality and other government offices. In each case a serious attempt was made to preserve the historic character of the area.

The scheme by Nancy Lamb and Victor Dadras emphasized the open, garden-like character of the site. It covered a major terraced parking structure with elaborate landscaping, thus creating a major open space overlooking Damascus Gate. The Russian church was the centerpiece of this large new park and was flanked by two nineteenth-century structures, which were to be rehabilitated and enlarged. The proposal by Amir Mann had less open space than the Dadras–Lamb scheme. He proposed two rows of terraced structures on either side of the park stepping toward Damascus Gate. The Mann proposal also modified Oster Square, which was to house a new city hall. The expanded city offices would be located in the rehabilitated buildings that presently define the square. Finally, the proposal by Scott Levitan also set the church in the center of a park, but extended the nineteenth-century structures with a series of courtyard buildings with sloped tile roofs reminiscent of the surrounding structures.

**5.19**

**5.18** *(Preceding page) Aerial view of the Russian compound looking west. Prominent features include the Old City on the left, the Russian cathedral at the top along Jaffa Road. At the bottom is the edge of the Arab business district.*

**5.19** *View of the Russian compound at the turn of the century.*

**5.20** *Parking is the current predominant activity in the open spaces of the Russian compound.*

**5.21** *View of the Russian cathedral.*

5.20

All three schemes restricted building height to four stories and demonstrated that both considerable floor space and sufficient parking could be provided while offering the city an attractive open space adjacent to downtown. The schemes also demonstrated the pivitol role the Russian compound has as a link between the proposed developments at Damascus Gate and Mamilla and the existing downtown.

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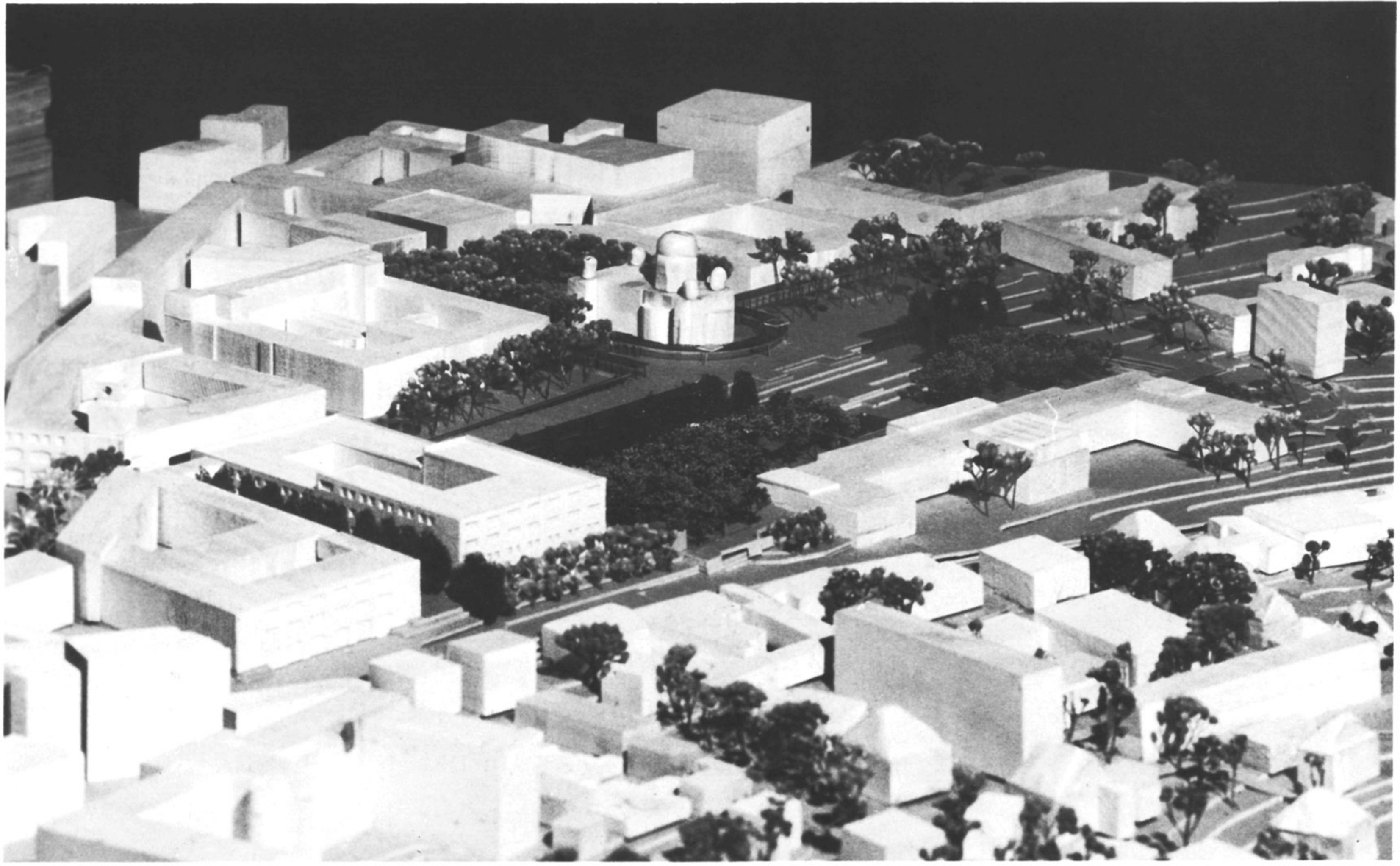

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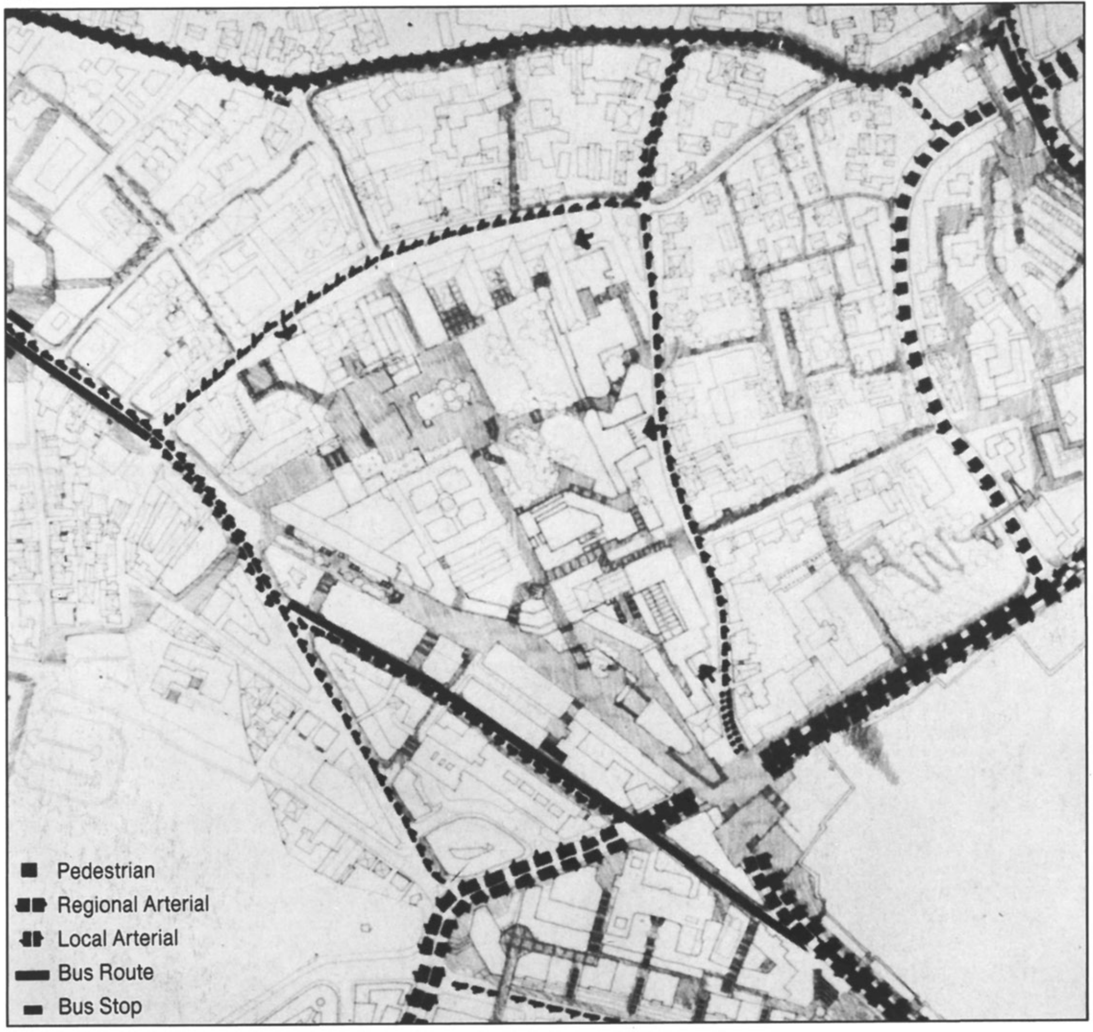

**5.22** *Model of proposal by Levitan for the Russian compound. The Russian cathedral is in a contained garden, which is linked with corridors through commercial development to the existing street pattern around it.*

**5.23** *Pedestrian circulation diagram (Levitan). The Russian compound is linked back to the city's pedestrian movement system.*

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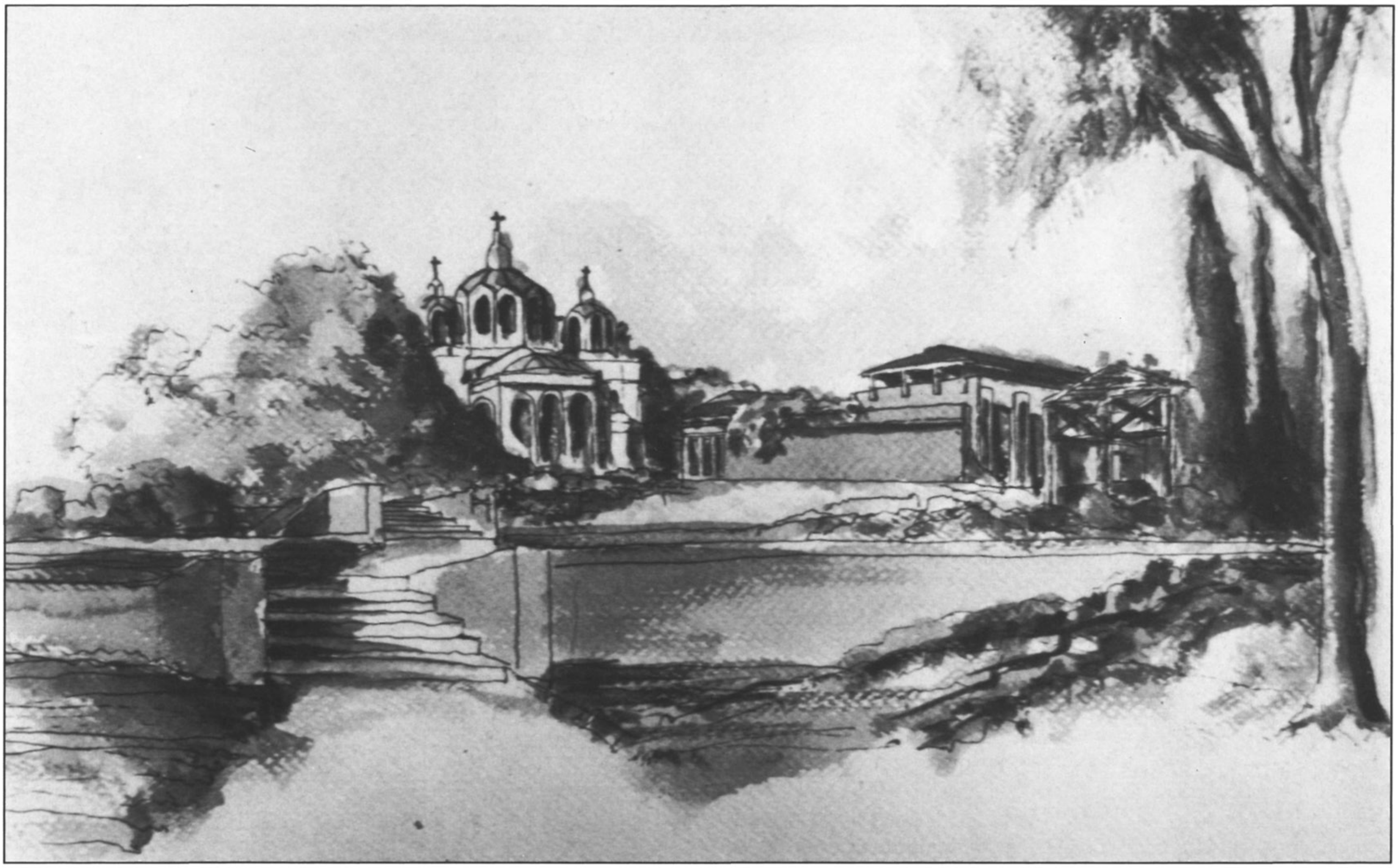

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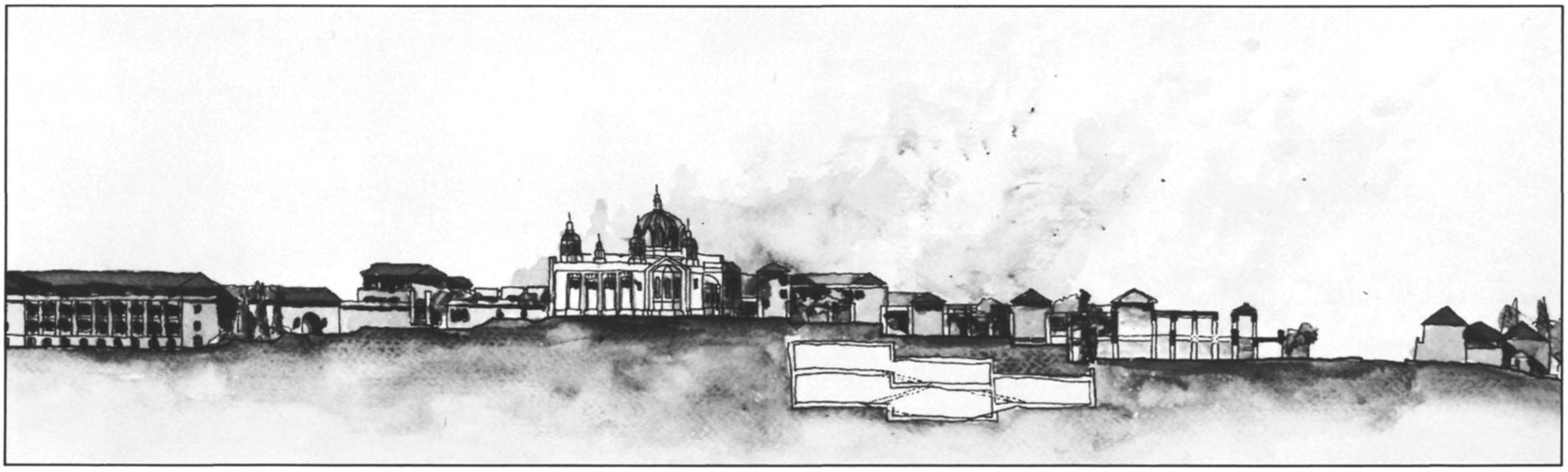

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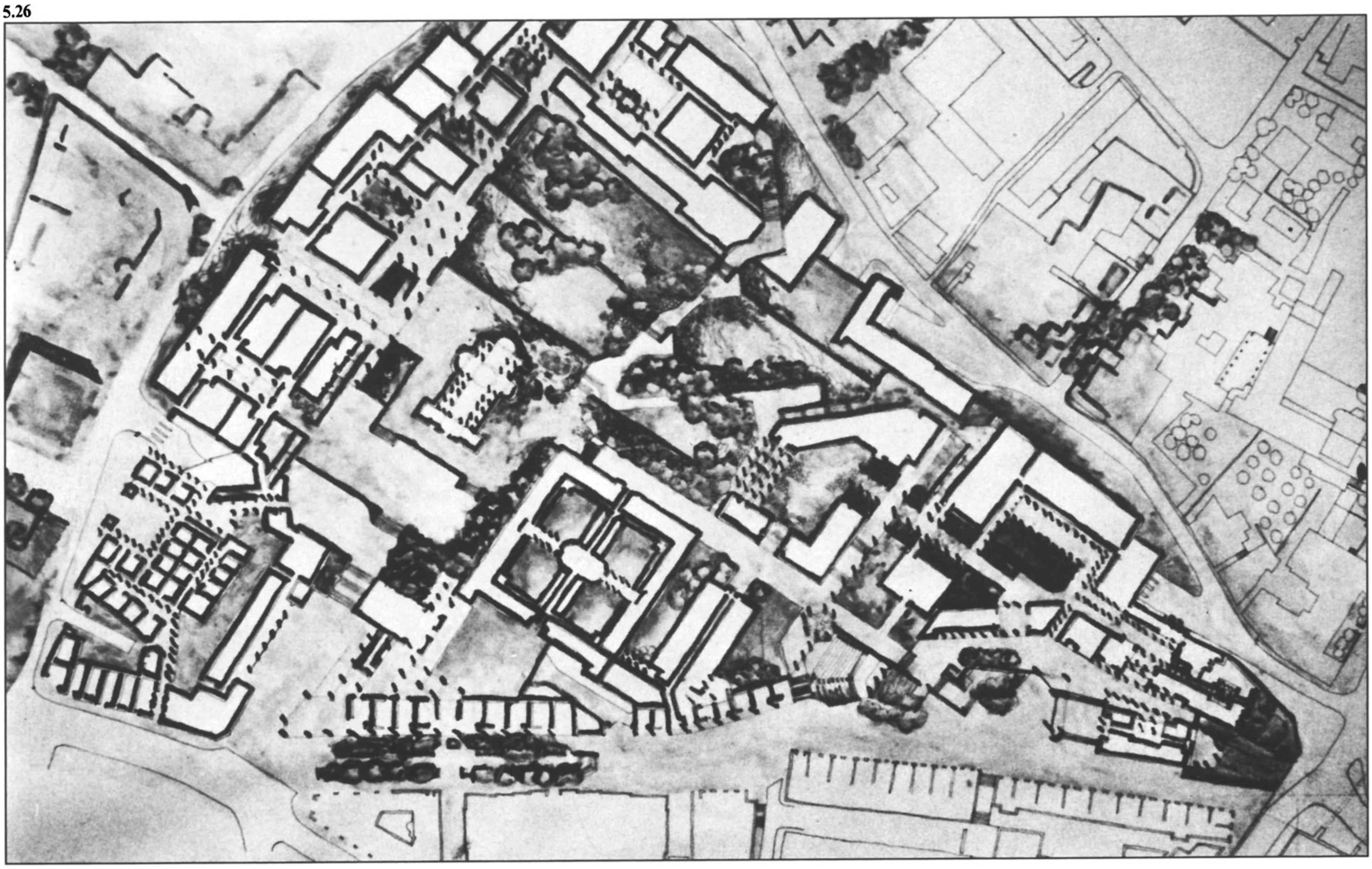
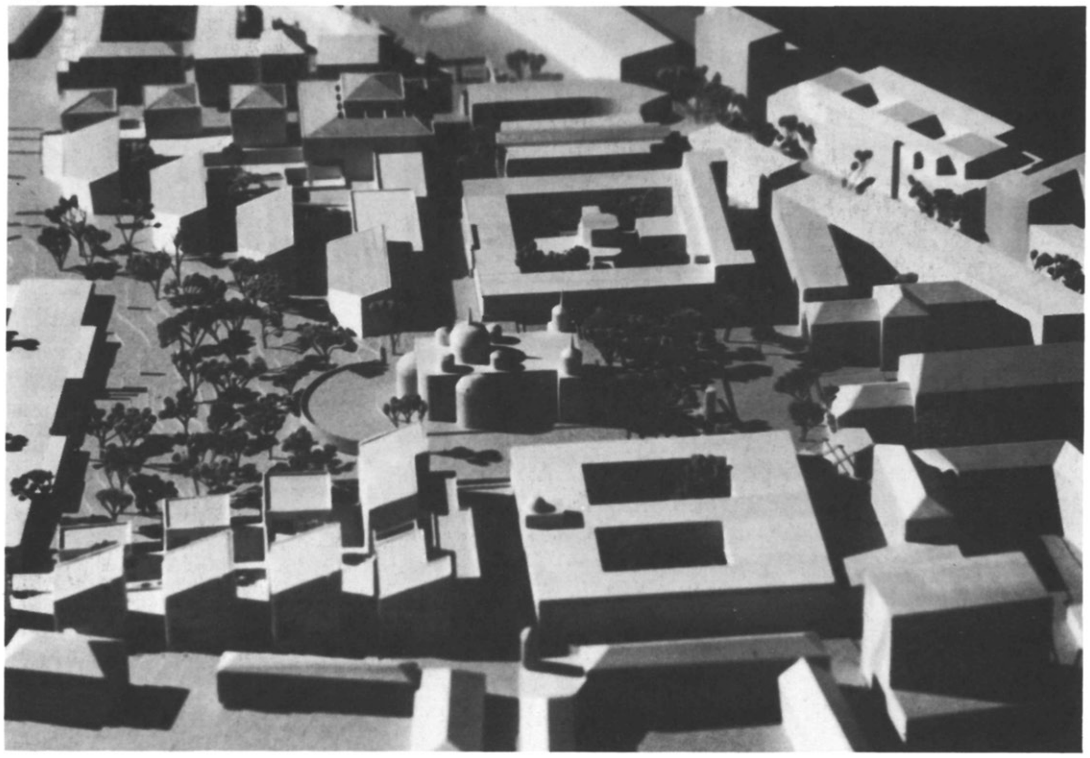


**5.24** *Perspective of the approach to the Russian cathedral from the east (Levitan).*

**5.25** *Section (west-east) through the ridge of the proposal showing the institutional structures and courtyards. The Russian cathedral is in the center. Parking facilities are provided below grade (Levitan).*

**5.26** *Site plan of proposal showing: a. pedestrian corridors to adjacent areas; b. garden; c. institutional buildings; and d. underground parking (Levitan).*

**5.27**



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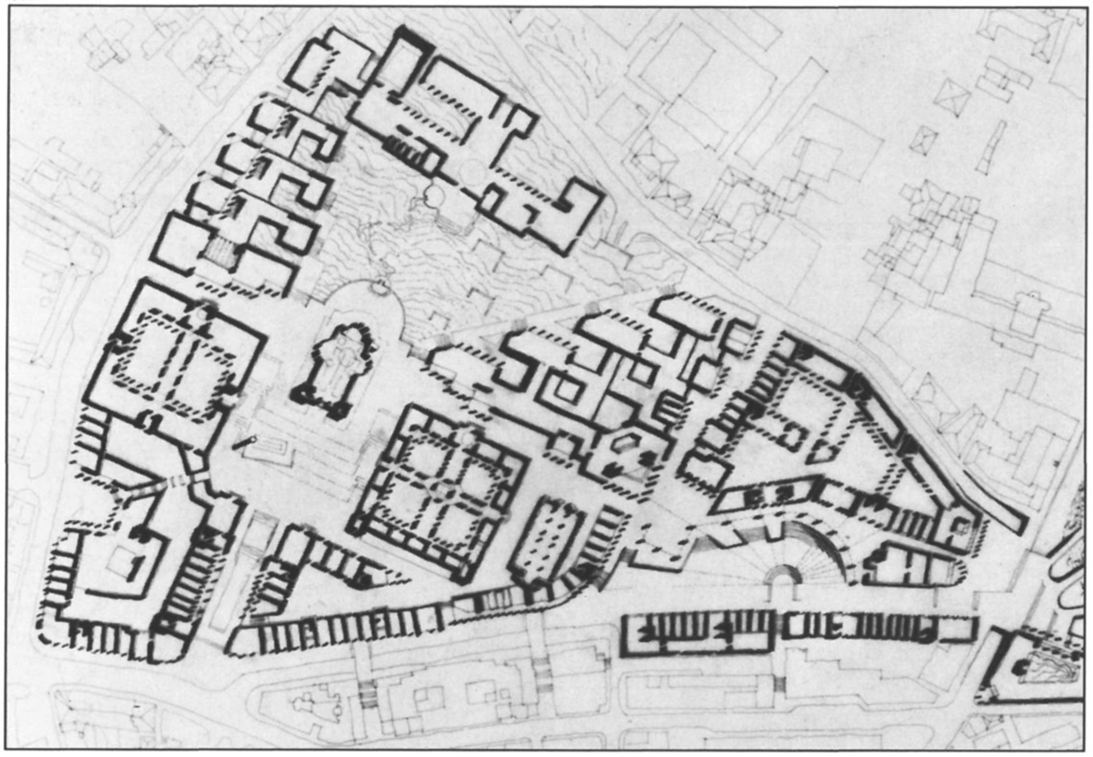

**5.27** *Model proposal by Man, view from north to south of the Russian compound. The Russian cathedral is in the center of a wedge-like garden that opens the views to the east. The compound and its cathedral are therefore highly visible from the Damascus Gate area.*

**5.28** *Proposal for the reconstruction of the Russian compound around a large garden oriented toward connections to the Old City. A principal compound, with city hall, is developed off Jaffa Road at the right corner around a generous plaza (Man).*

**5.29** *Site plan of proposal with diagram of vehicular circulation. The intersection of Zohal Street and Jaffa Road (top left corner) is suppressed below grade to allow for direct on-grade pedestrian connection to the Old City (Man).*

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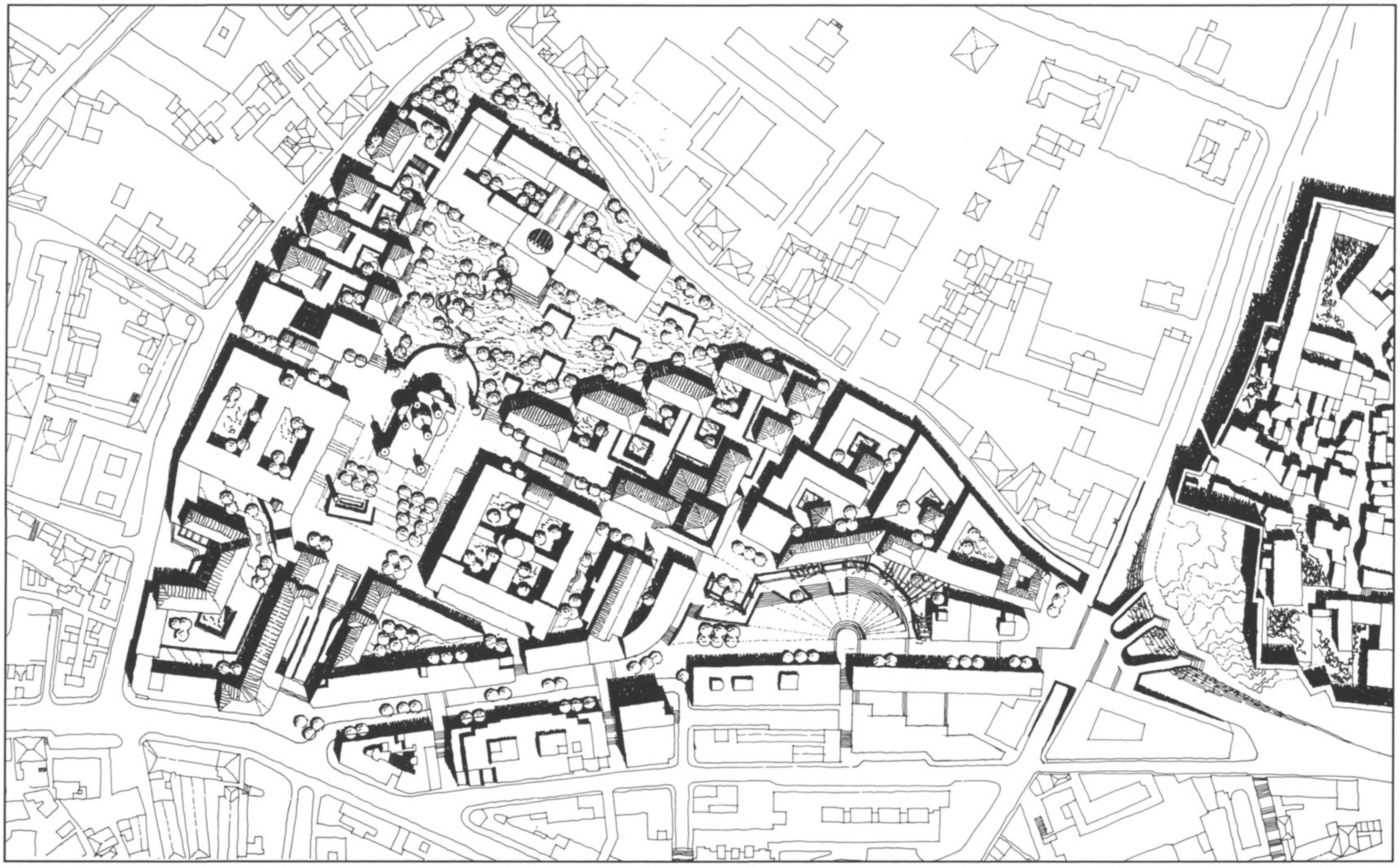

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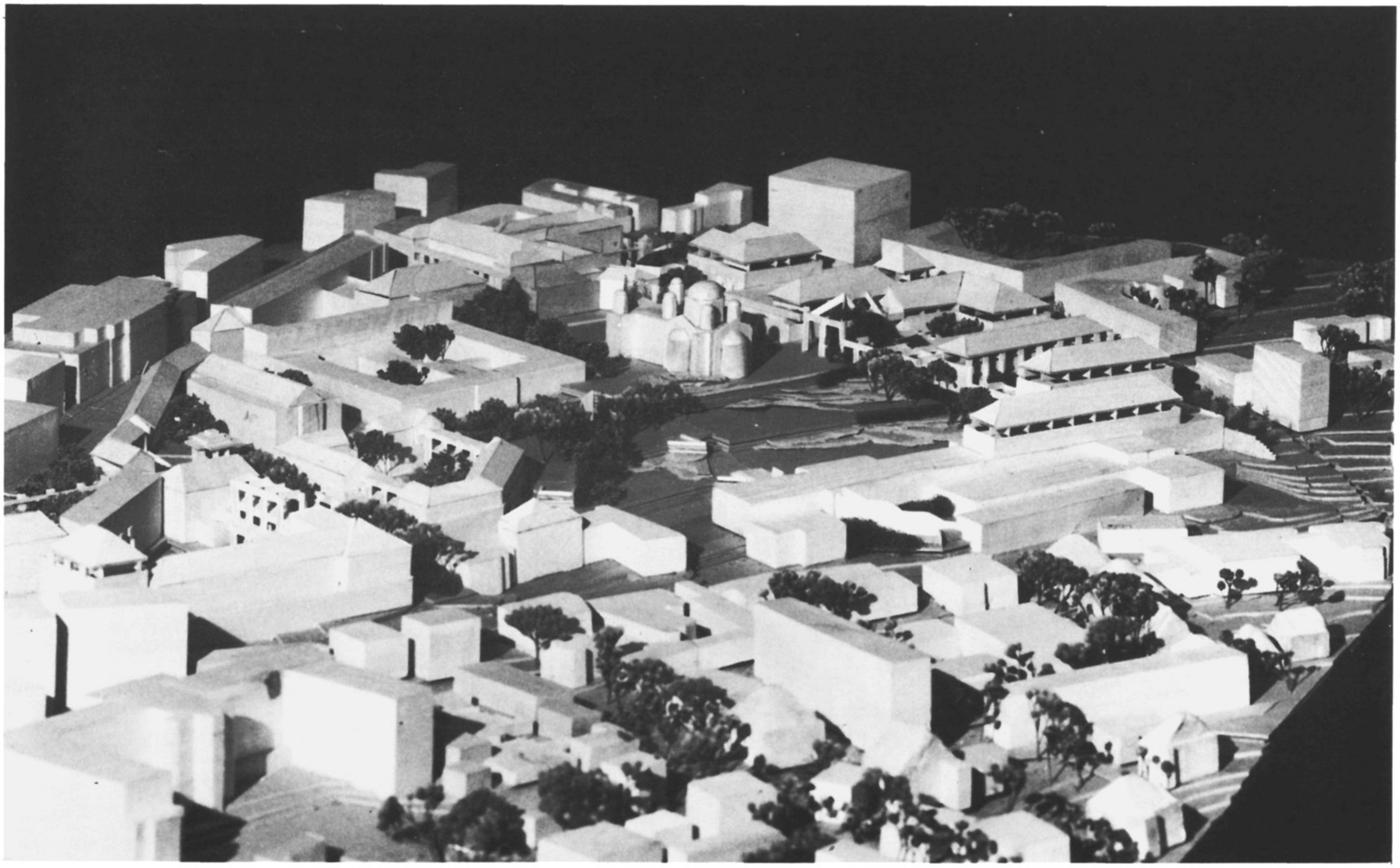

**5.30** *Model, view from the east to the west of the proposal for the reconstruction of the Russian compound around an open-space system. It has an urban quality on the west side of the ridge and a more open landscape on the east, containing a series of gardens terracing down the hillside from the Russian cathedral (Dadras, Lamb).*

**5.31** *Roof plan of proposal showing: a. a large formal garden; b. urban square in front of the church; c. institutional buildings; and d. underground parking (Dadras, Lamb).*

**5.32** *Circulation diagram of proposal by Dadras and Lamb.*

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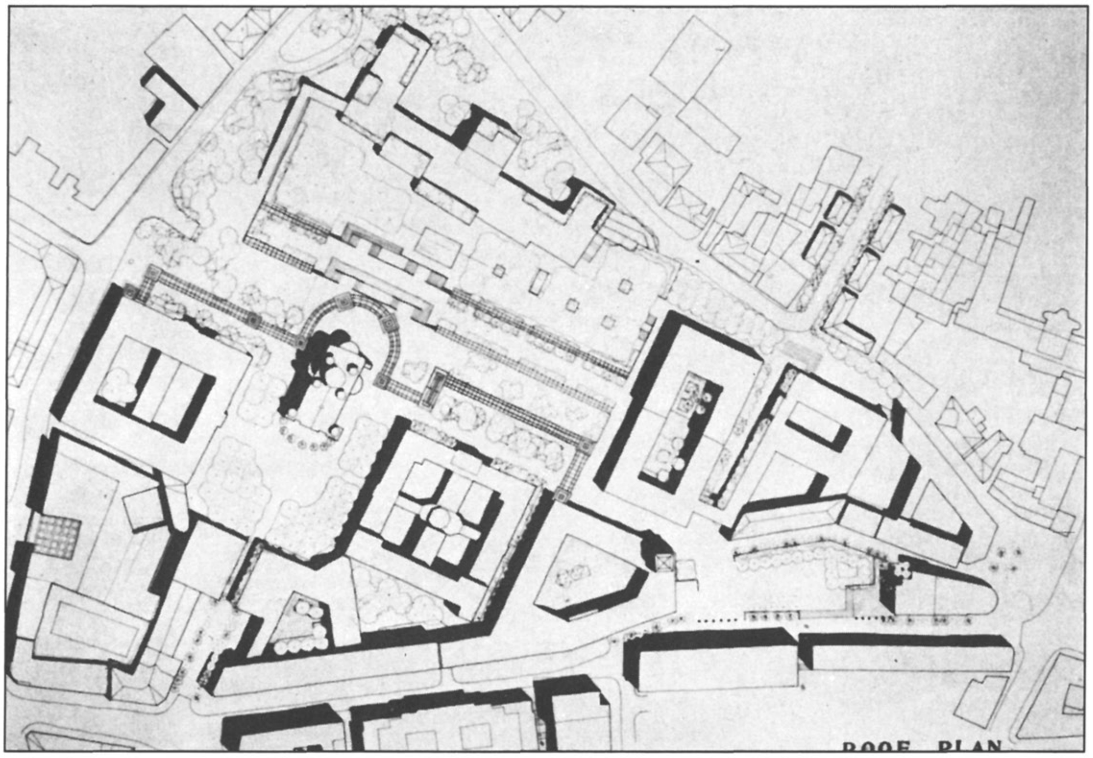

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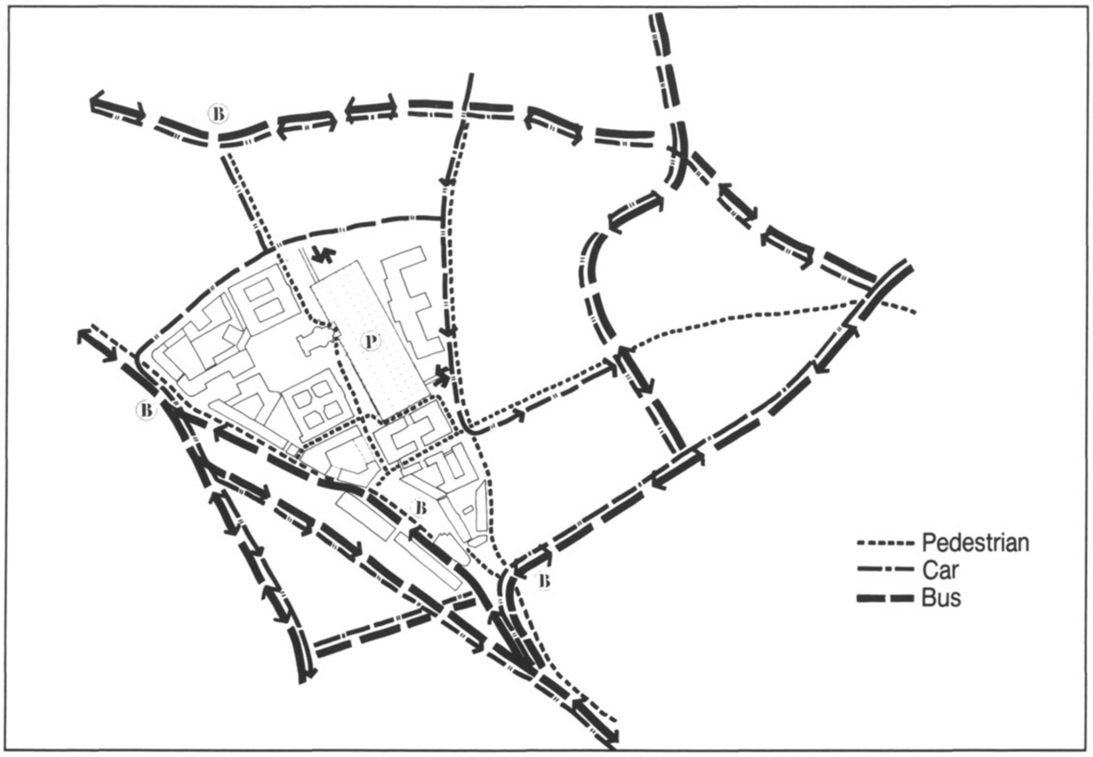

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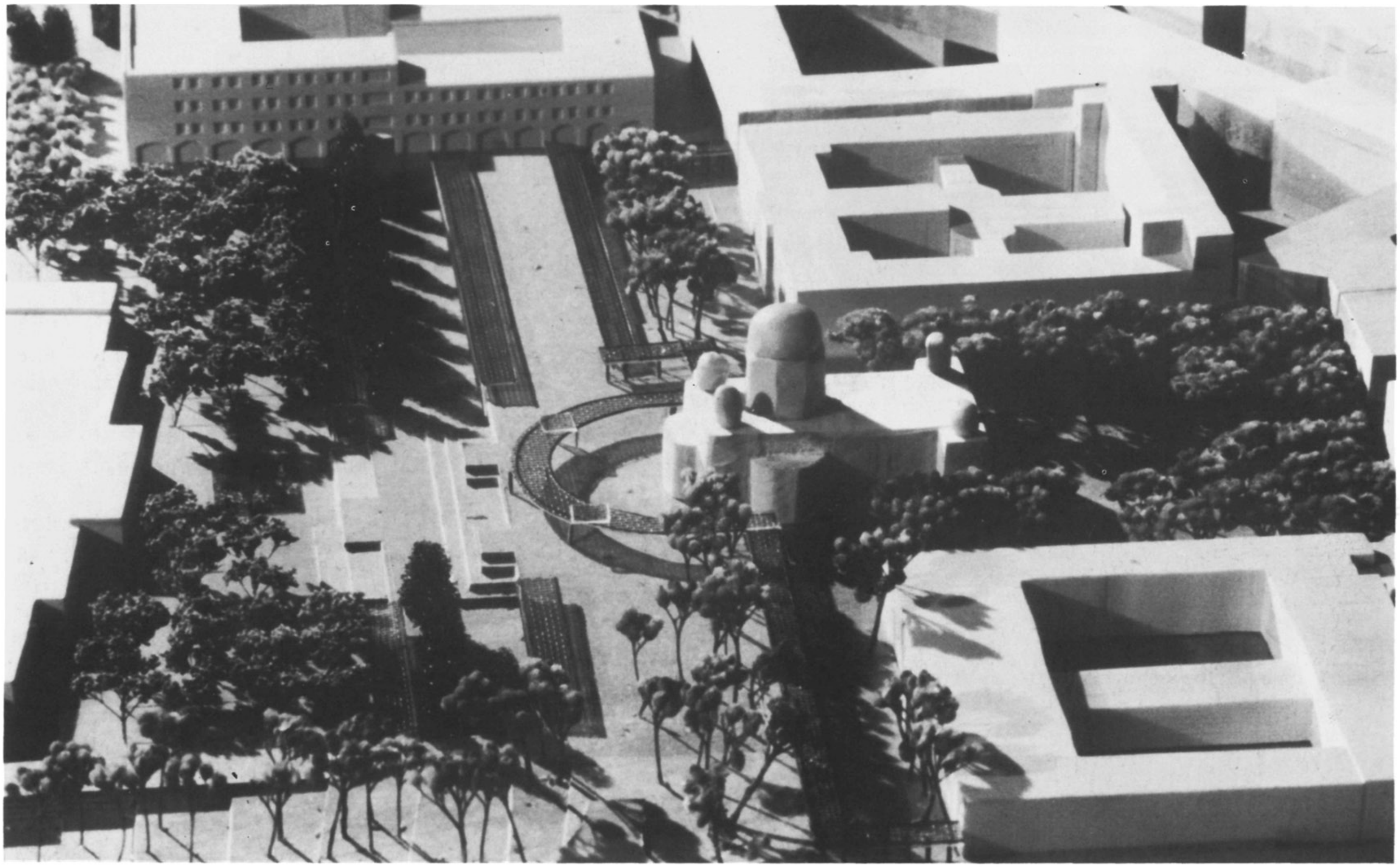

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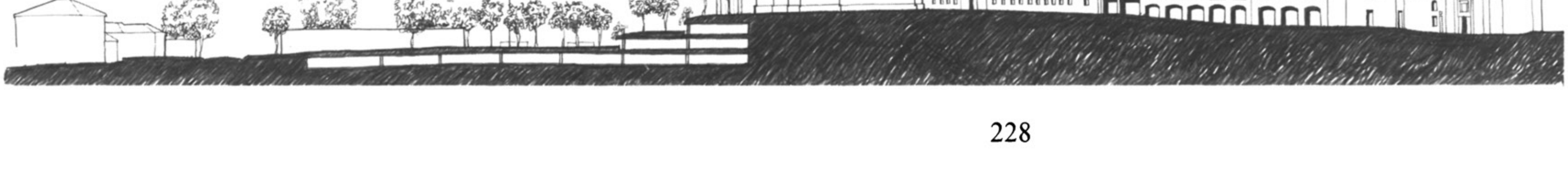

**5.33** *Model proposal by Dadras and Lamb showing the extent of open space in the midst of downtown. The buildings around it are primarily institutions.*

**5.34** *Section through the site looking south. Jaffa Road is at the far left. Parking is provided underneath the terraced garden.*

**5.35** *View of the triangle from Eylon Tower.*

## THE TRIANGLE

The least satisfactory section of downtown is a stretch along Jaffa Road fronting the triangle. This area is almost exclusively single-story structures, behind which, some years ago, was located the central bus station (which has since been relocated westward near the entrance from Tel Aviv). The proposal by Peter Schlesinger and Mong Lin Yap demonstrated how the area of the triangle might be consolidated by infilling and adding to existing structures, by rationalizing the pedestrian circulation system, and by expanding the Ben-Yehuda Street mall through several pedestrian alleys toward Jaffa Road. The major innovation in the proposal was an elongated courtyard building lined with shops, on the opposite side of the triangle along Jaffa Road. It would effectively extend the triangle area and expand the downtown retail facilities. The design demonstrated that this consolidation and expansion could be carried out in small phases, though it was clear that assembling the land parcels north of Jaffa Road would have to be done by a public authority. The Schlesinger–Yap proposal showed that with reasonably simple means and without resorting to tall buildings or a drastic change in the character of the triangle area, retail facilities could be more than doubled and more office space could be provided. It also demonstrated that these modest developments would greatly improve the image and street character of the downtown area.

A similar expansion of the triangle toward the west was proposed by Amelie Rennolds, who identified several dilapidated buildings located behind the frontage buildings of King George Street. King George Street is one of the principal retail streets of the city and yet fifty feet behind are vacant lots. Rennolds proposed a pedestrian galleria running from the crossroad of King George and Ben-Yehuda streets, next to Jerusalem's principal department store, behind the frontage buildings, through to Jaffa Road. It would create two rows of shops. To make the galleria alive, Rennolds proposed several connections to King George Street weaving through the existing building.

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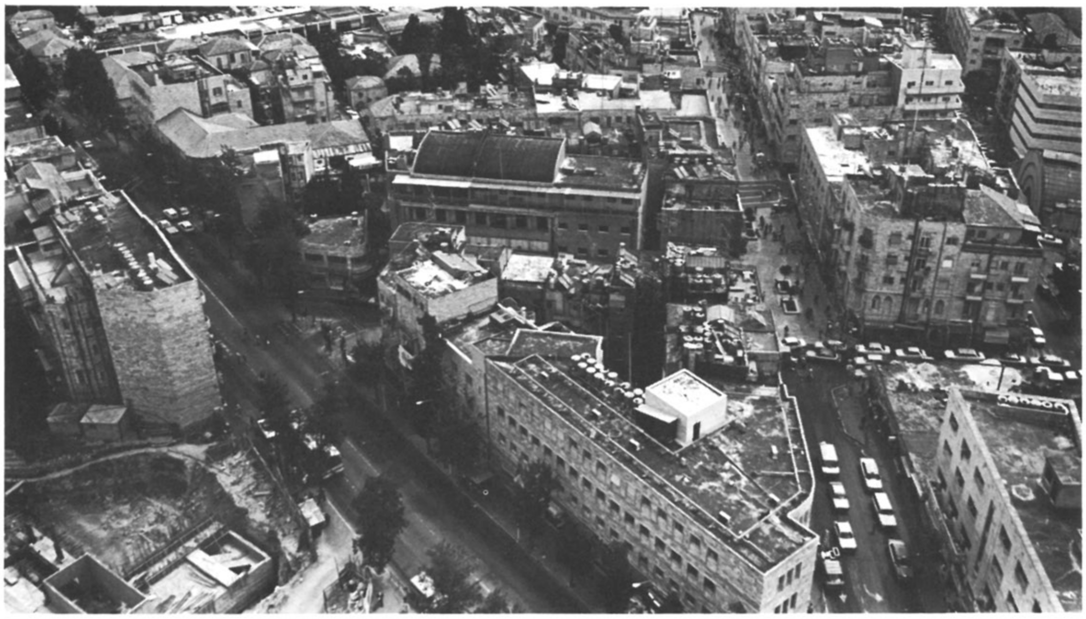

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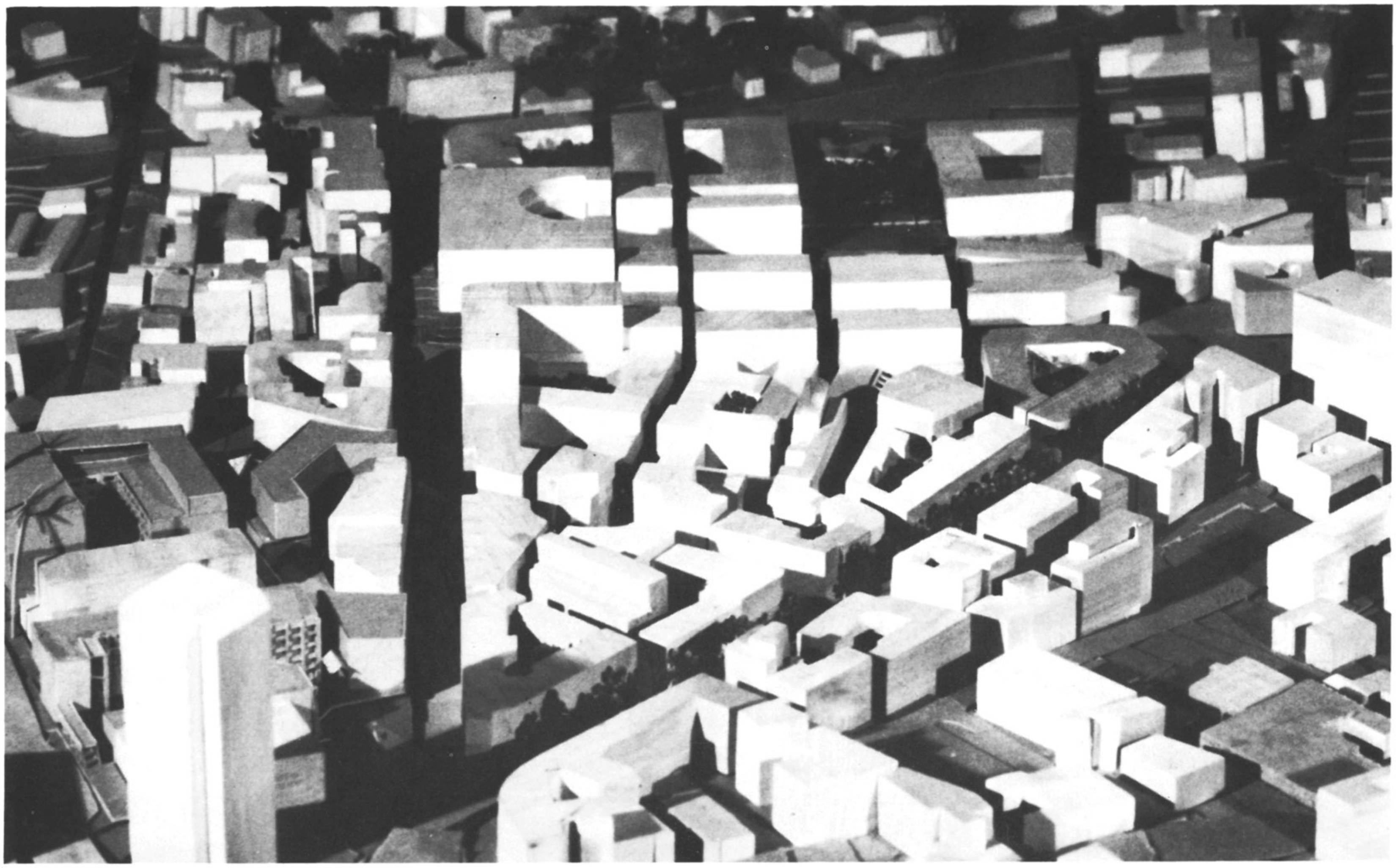

**5.36** *Model of proposal to reconstruct the triangle by adding the majority of commercial development northeast of Jaffa Road (Schleisinger, Yap).*

**5.37** *Roof plan showing proposed development of the triangle and north bank of Jaffa Road between Zion Square in the left and King George V on the right (Schlesinger, Yap).*

**5.38** *Longitudinal section through commercial development and pedestrian plaza on the north bank of Jaffa Road (Schlesinger, Yap).*

**5.39** *Cross section through Jaffa Road. From left to right are the commercial center, a pedestrian plaza, and the Anna Ticho Museum and garden.*

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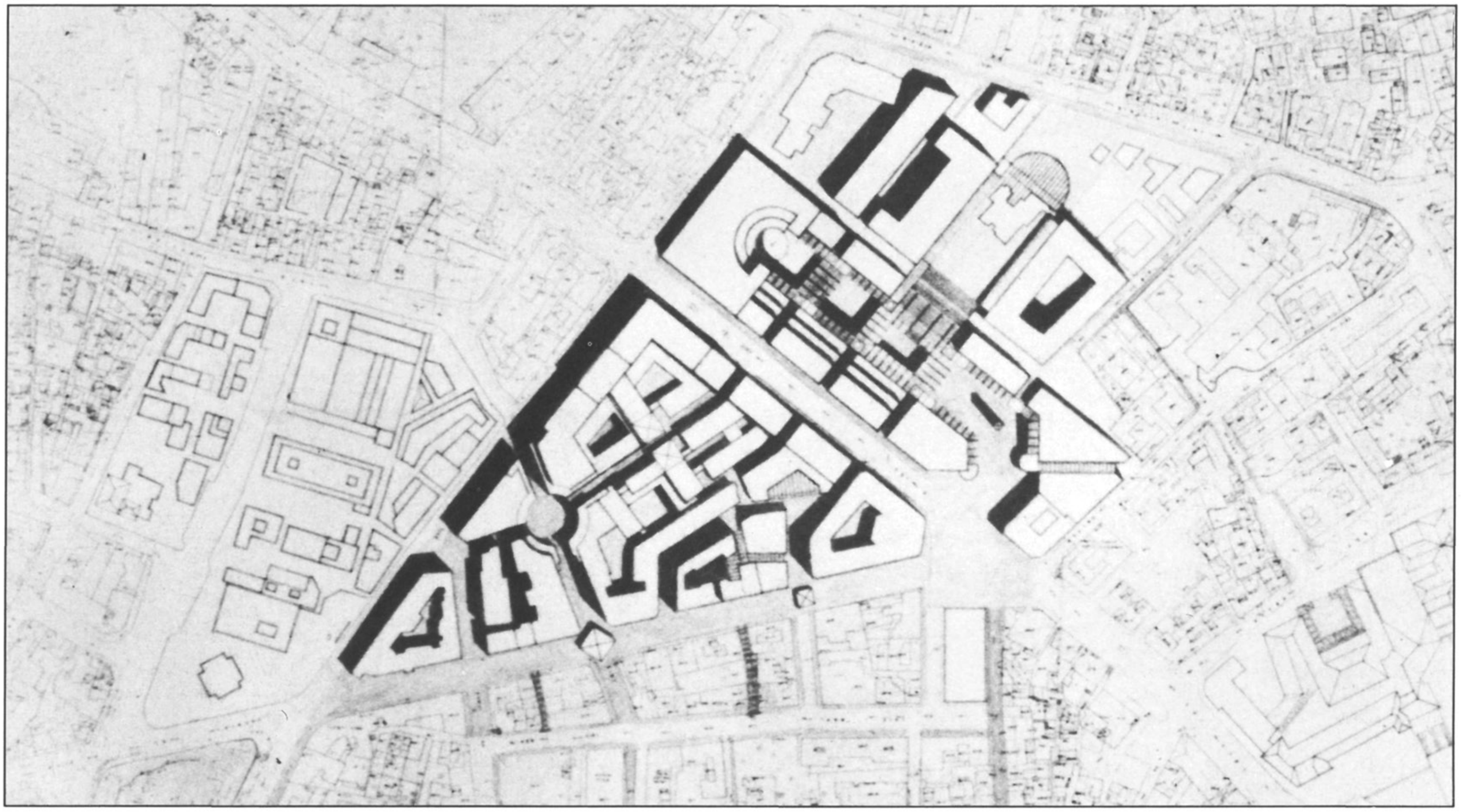

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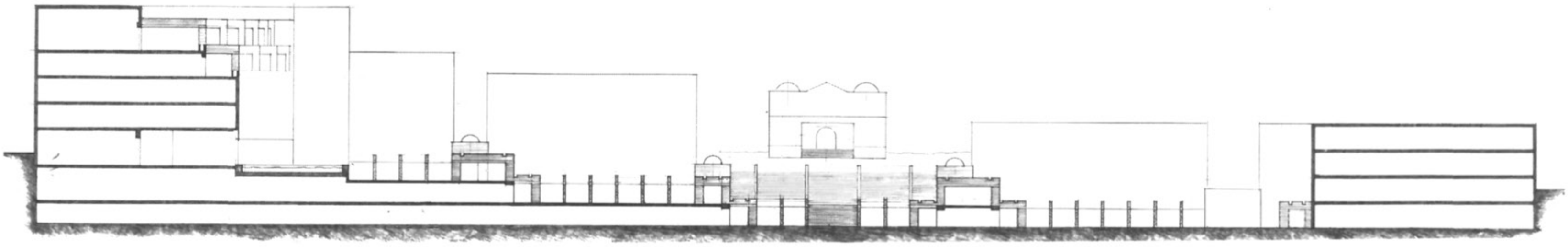

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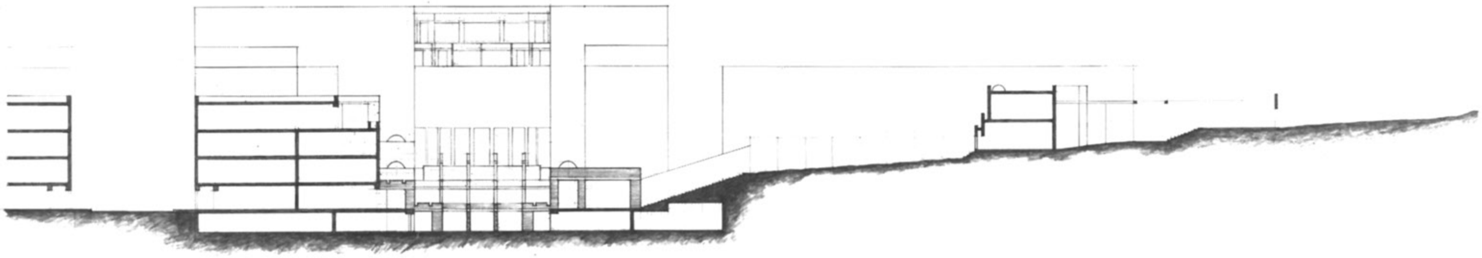

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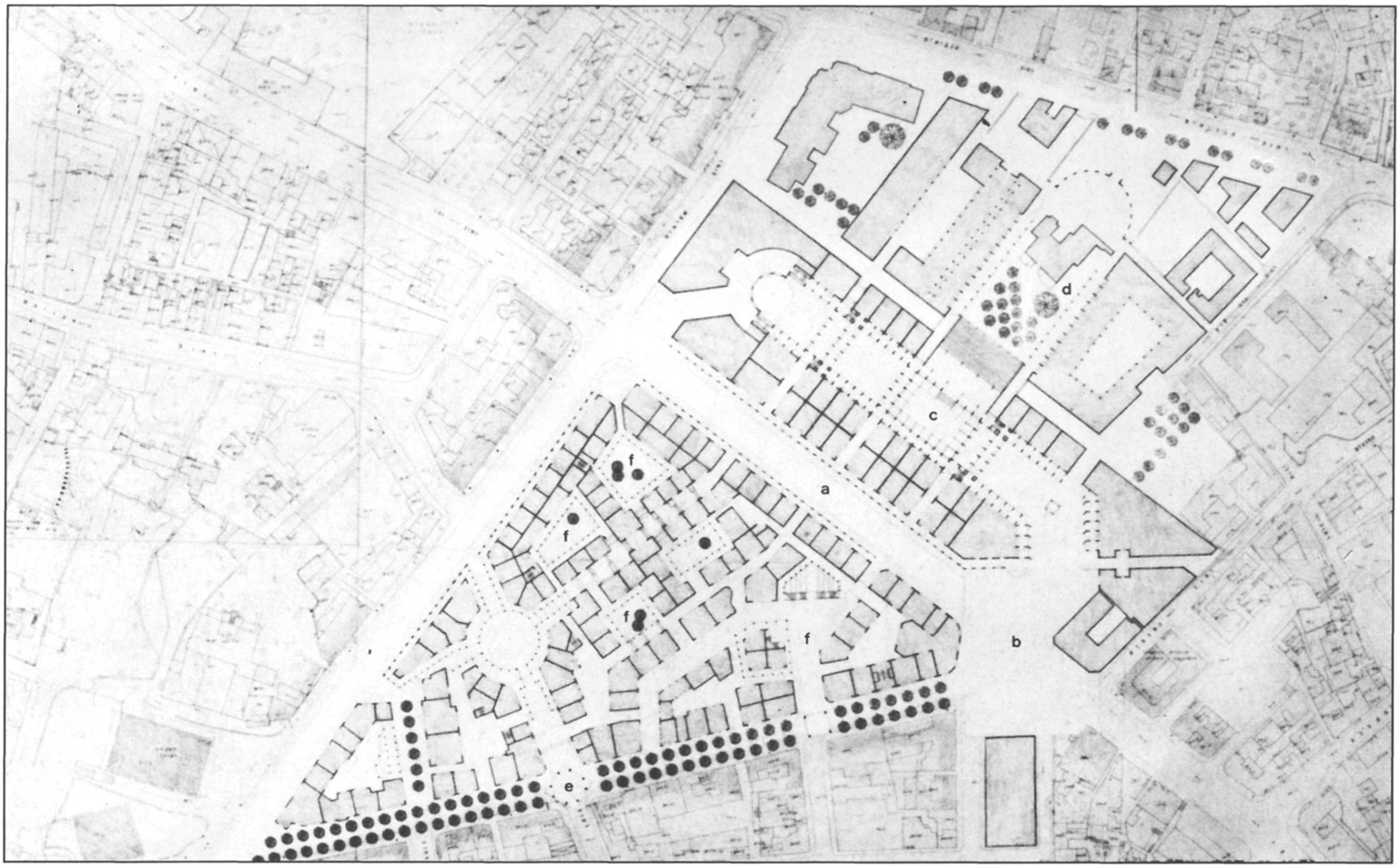

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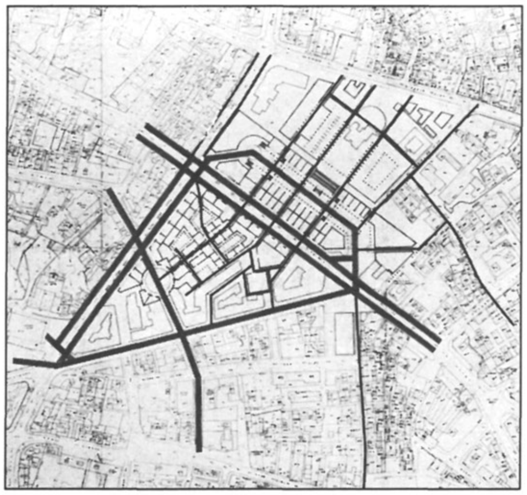

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**5.40** *Ground-level plan of the triangle and the north bank of Jaffa Road (a) off Zion Square (b). The plans show the pedestrian plaza (c), the Anna Ticho Museum and garden (d), Ben-Yehuda Street (e), and the reuse of alleys and courtyards (f) of the triangle area (Schlesinger, Yap).*

**5.41** *Proposed pedestrian circulation for the triangle area (Schlesinger, Yap).*

**5.42** *Perspective view of a renovated alley in the triangle (Schlesinger, Yap).*

**5.43** *Relocated remains of the entrance bay to the old building of Talita Kumi. It was replaced by a retail and office compound.*

**5.44** *Model of proposal for the Talita Kumi through the redesign of pedestrian movement (Rennolds).*

**5.43**

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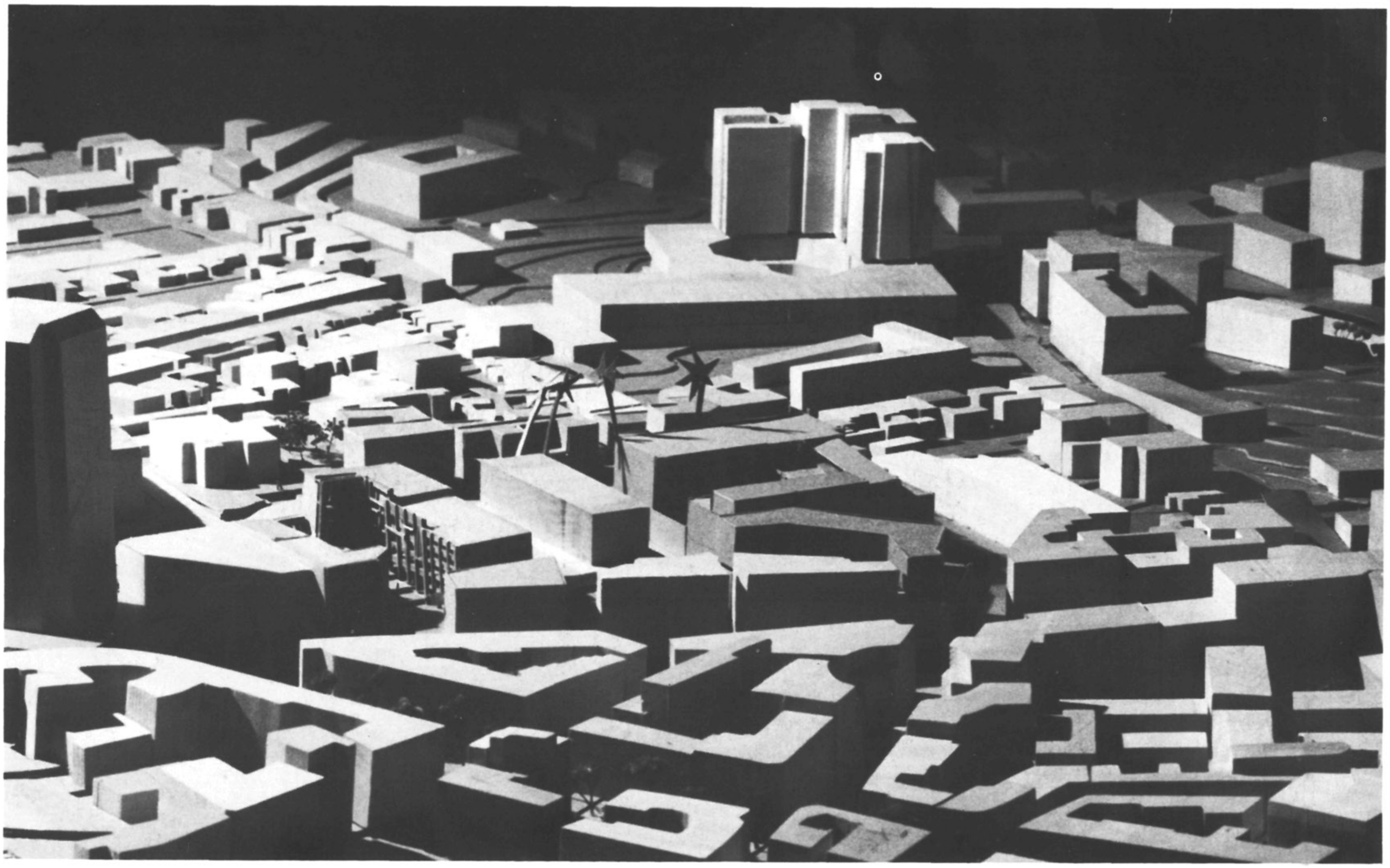

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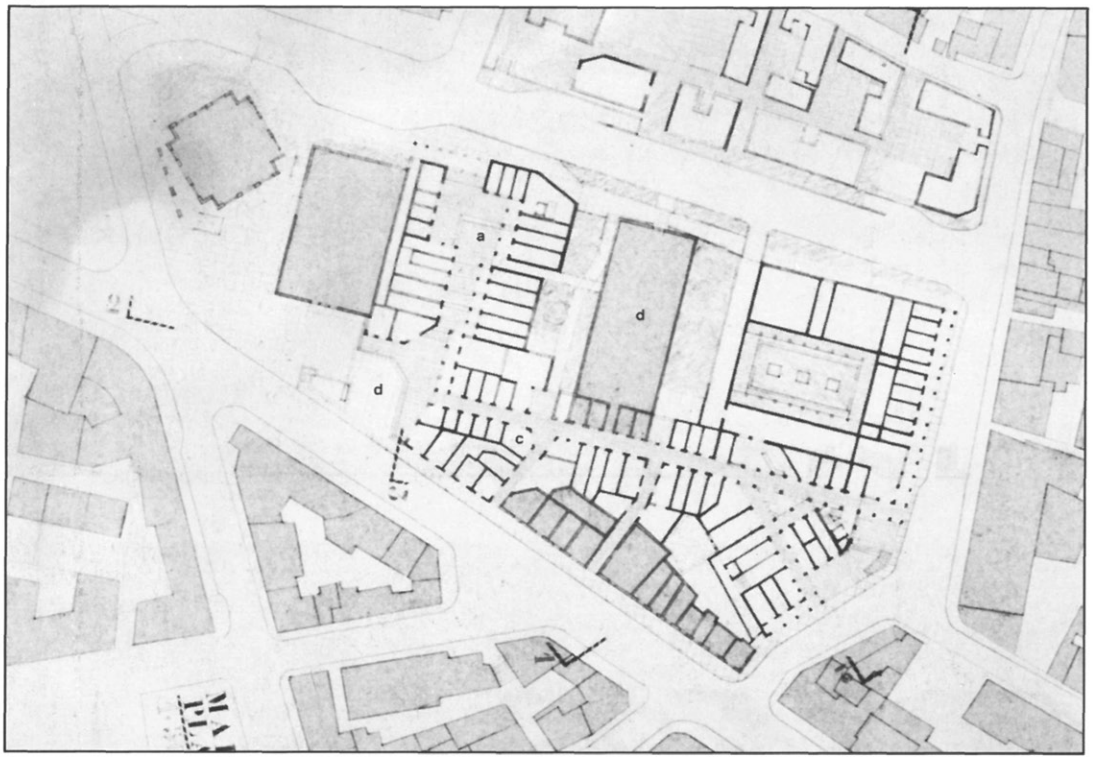

**5.45** *Site plan of proposal showing: a. pedestrian alleys; b. public square; c. galleria; and d. commercial development.*

**5.46** *Roof plan of proposed Talita Kumi development and streets around it (Rennolds).*

**5.47** *Perspective of the alley leading up to the galleria (Rennolds).*

**5.48** *Model of proposal for Talita Kumi from the east. In the background is the existing Eylon Tower (Rennolds).*

**5.49** *Axononometric study of the main public spine of the scheme (the galleria), with views on the left along the public circulation (Reynnolds).*

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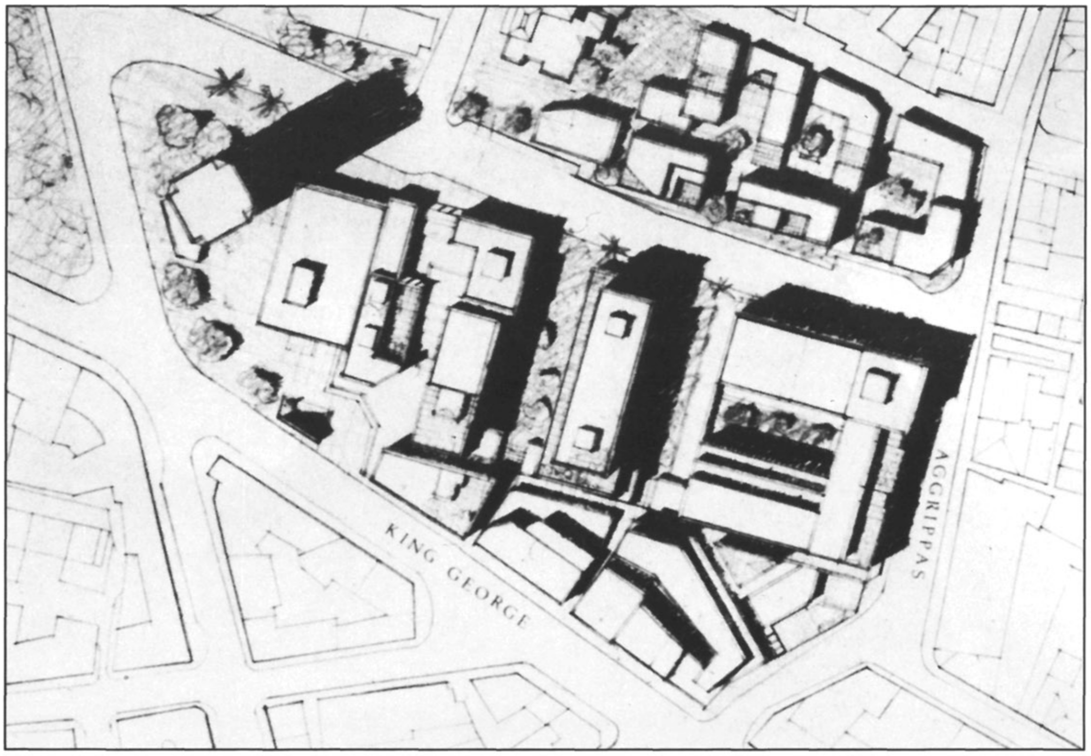

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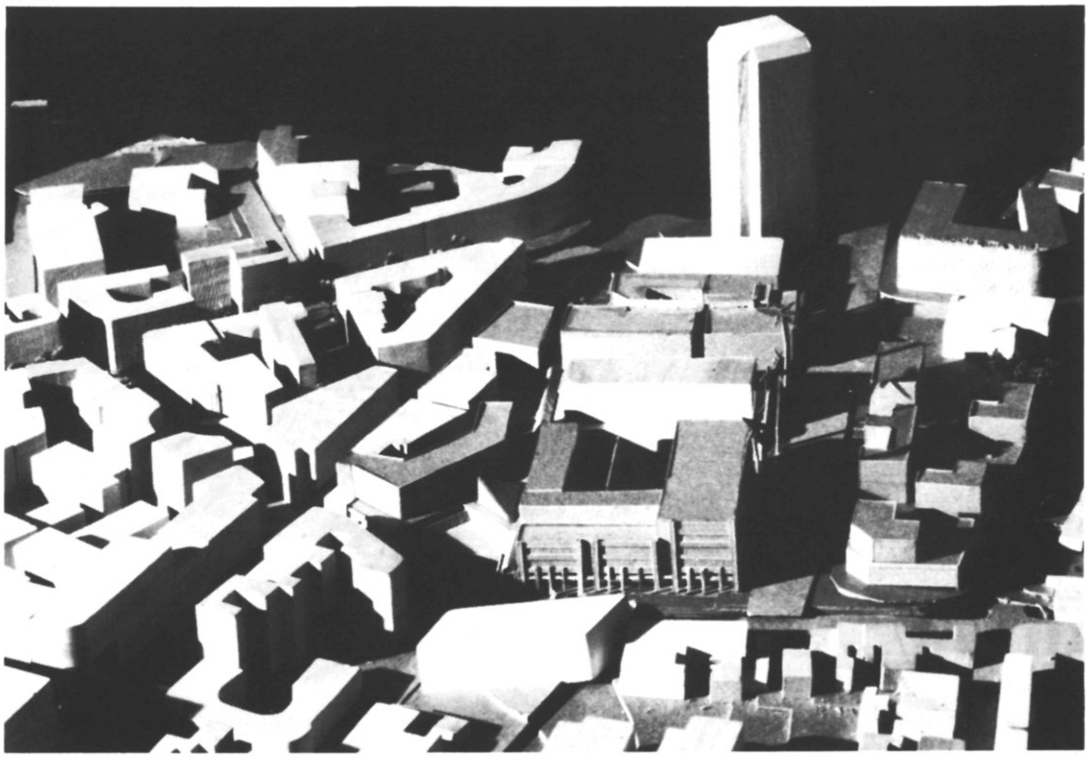

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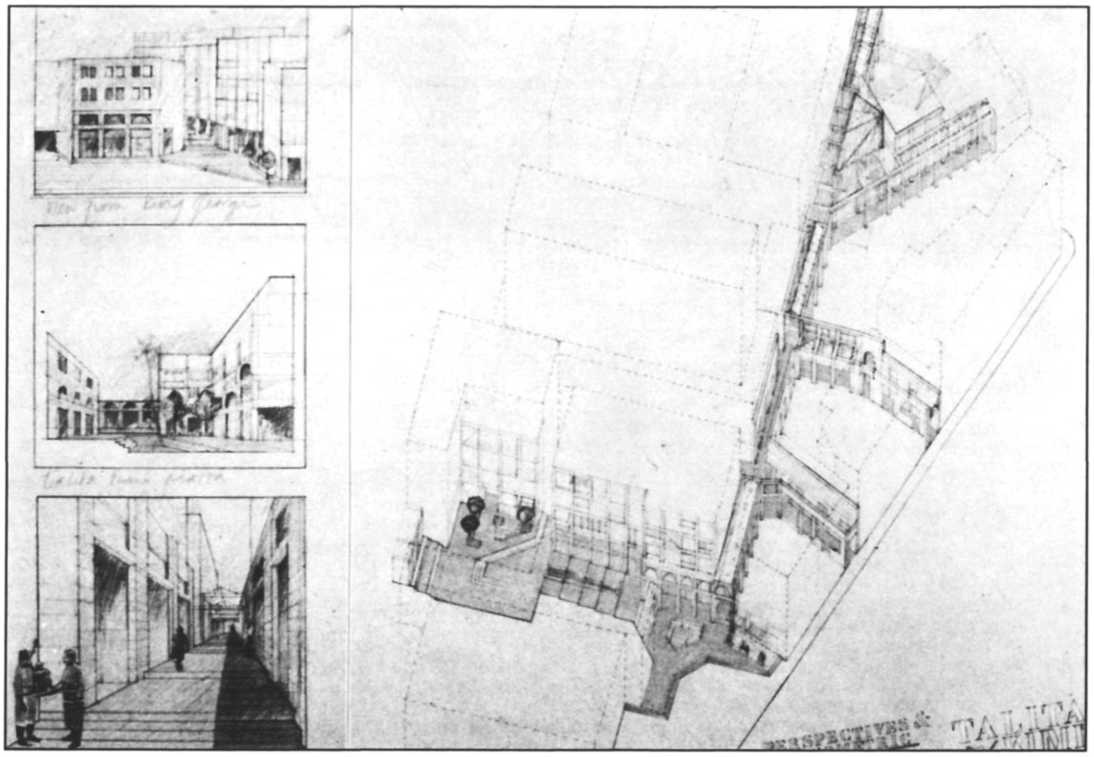
View from King George
Talita kumi piazza
PERSPECTIVES &
TALITA
KUMI

## PEDESTRIANIZING DOWNTOWN

A proposal to expand the Ben-Yehuda mall into a network of pedestrian streets was developed by Stephan Bolliger and Shuji Miura. They identified several areas which lent themselves to easy pedestrianization. These were the triangle and Jaffa Road; the Russian compound; and the area adjacent to Mamilla — Jaffa Road, King Solomon Street, and Shlom Zion Street. Linking these to each other would create a continuous pedestrian circulation unhampered by traffic throughout downtown. Obviously, certain sections along Jaffa Road would be difficult to develop because of the impact on public transportation, but the proposal did demonstrate that Ben-Yehuda mall could be greatly expanded, creating several havens for pedestrians in the district.

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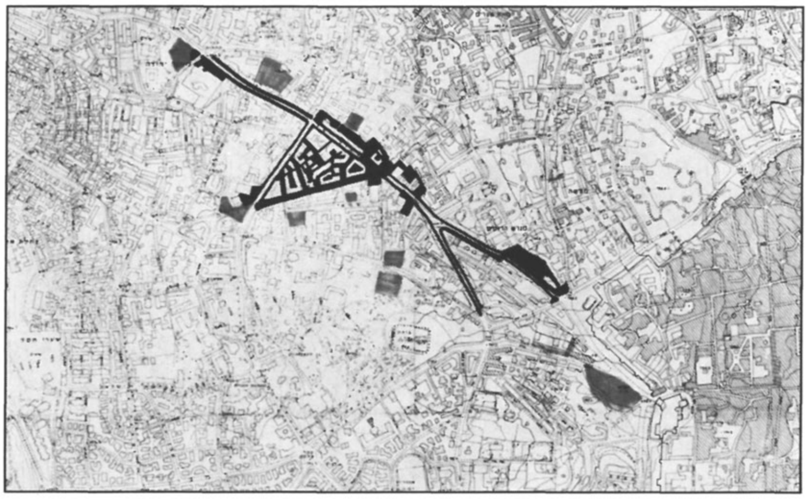
**5.53**



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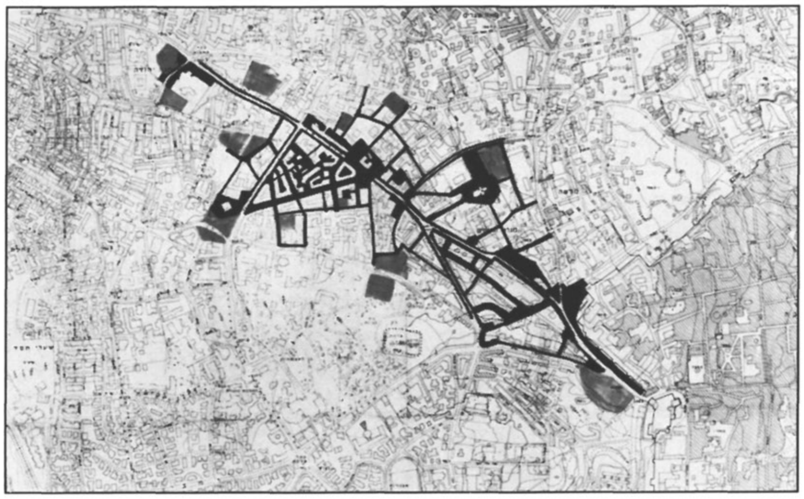

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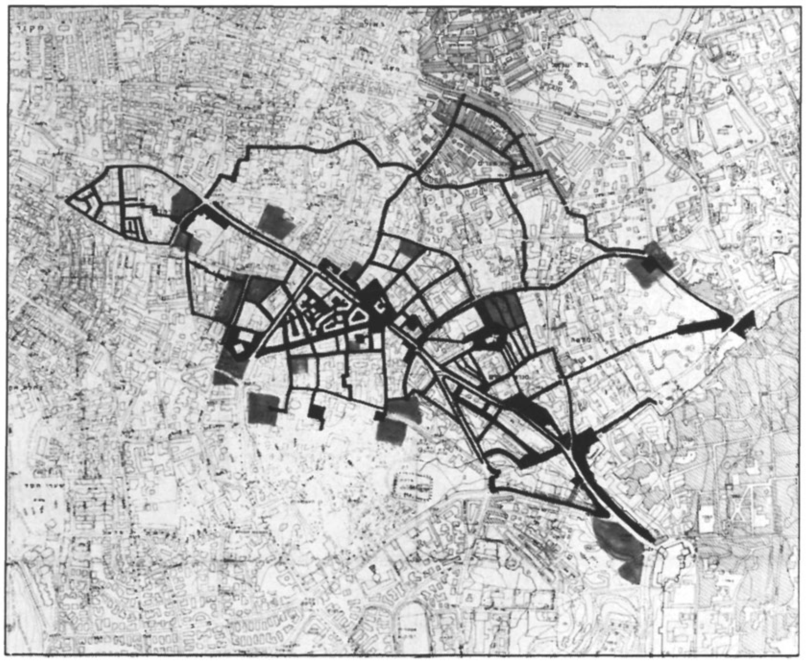

**5.50** *Traffic in downtown Jerusalem.*

**5.51** *Bird's eye view of Ben-Yehuda Mall.*

**5.52** *View of Ben-Yehuda Street looking west toward Eylon Tower and showing recently completed pedestrian improvements.*

**5.53** *Pedestrianization plan, stage one. Efforts will be made to pedestrianize main streets from Zahal Square to Clal Center (Bolliger, Miura).*

**5.54** *Pedestrianization plan, stage two. Pedestrianization will expand to the streets along and around Jaffa Road (Bolliger, Miura).*

**5.55** *Pedestrianization plan, stage three. The pedestrian system will expand further east to reach the Damascus Gate and Mea She'arim areas (Bolliger, Miura).*

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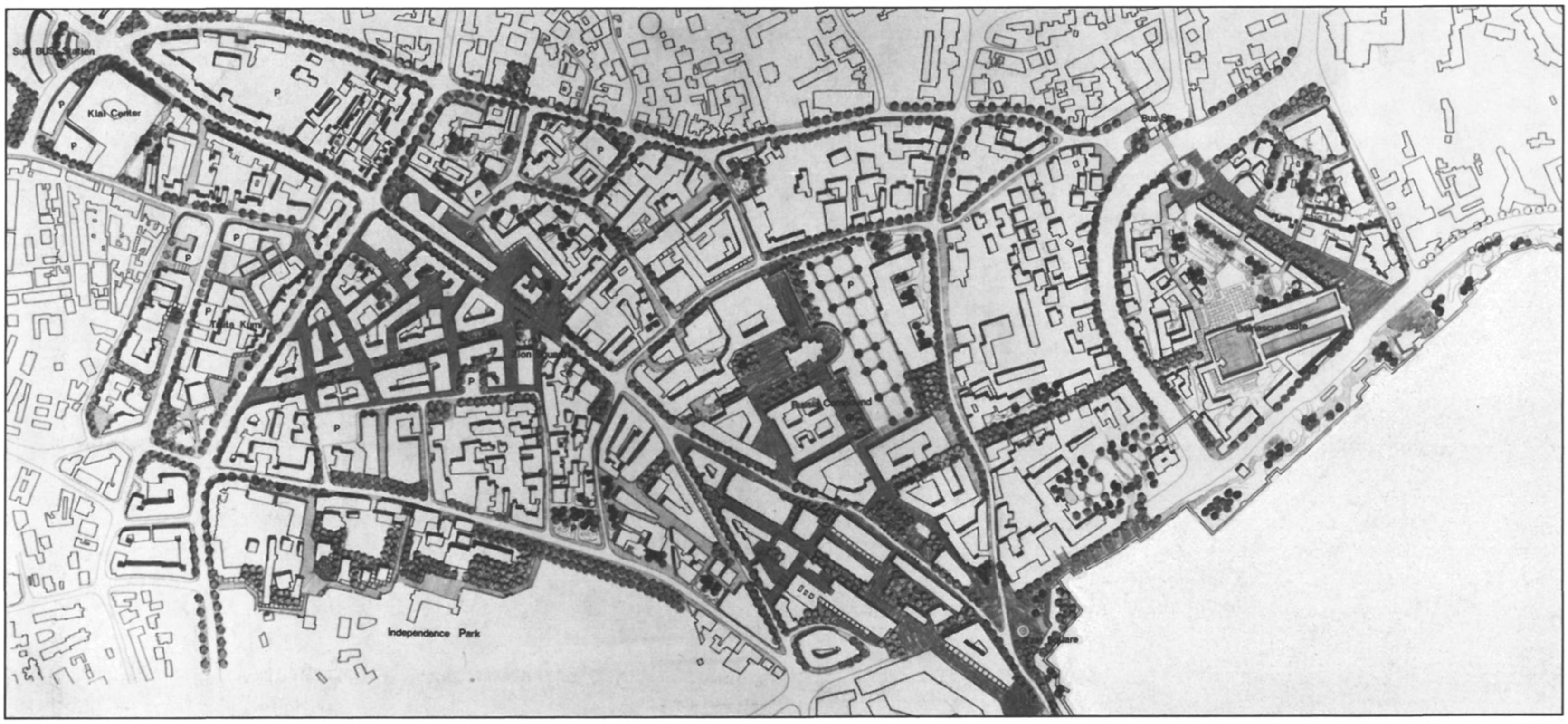

## ENTRANCE TO DOWNTOWN

Finally, one proposal put some order into the mess at the entrance to the city from Tel Aviv. This area contains the central bus station, the convention center and the Hilton Hotel as well as several other new hotels and office buildings. The road system in the area is the product of several unrelated traffic-management schemes. As visitors arrive from the Tel Aviv highway at the principal intersection, the road forks out in four directions. The forking of the road creates considerable confusion. One route leads to Jaffa Road, which is now restricted to private traffic and serves only buses and taxis. Hence the necessity for detouring to alternative routes along the Machaneh Yehuda market and Agrippas Street. Christian Leprette and Remi Pelet proposed rearranging the road at the entrance so that the two westward routes are replaced by a single boulevard. The extension of Jaffa Road is eliminated and kept only for the service of buses, with a major six-lane boulevard swinging by the convention center and toward downtown. This minor rearrangement of roads created several parcels suitable for development. Laprette and Pelet also demonstrated how pedestrian movement from the bus station to the convention center could be accommodated in a bridge that would form a gateway to the city.

**5.56** *Site plan of streets and alleys in downtown area proposed for pedestrianization. This proposal calls for a comprehensive network of pedestrian-oriented street improvements in the center city. Prominent features will include major generators of pedestrian activity, major parking lots and structures, and exclusive pedestrian precincts (Bolliger, Miura).*

**5.57** *Aerial view of the western entrance to the city, 1983. At center left is Jerusalem's main bus terminal, and at the right is Jerusalem's largest convention center and the bus depot.*

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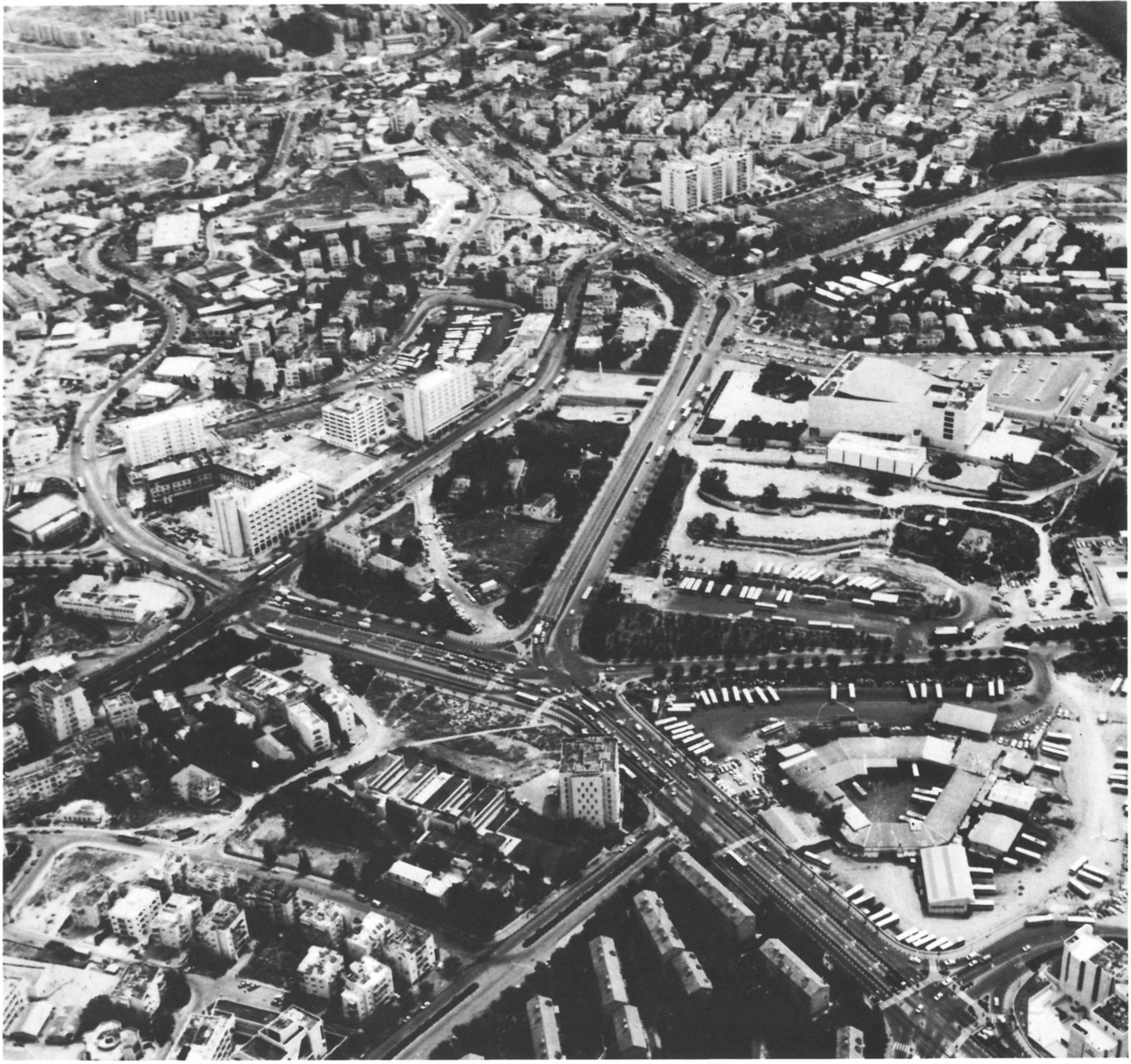

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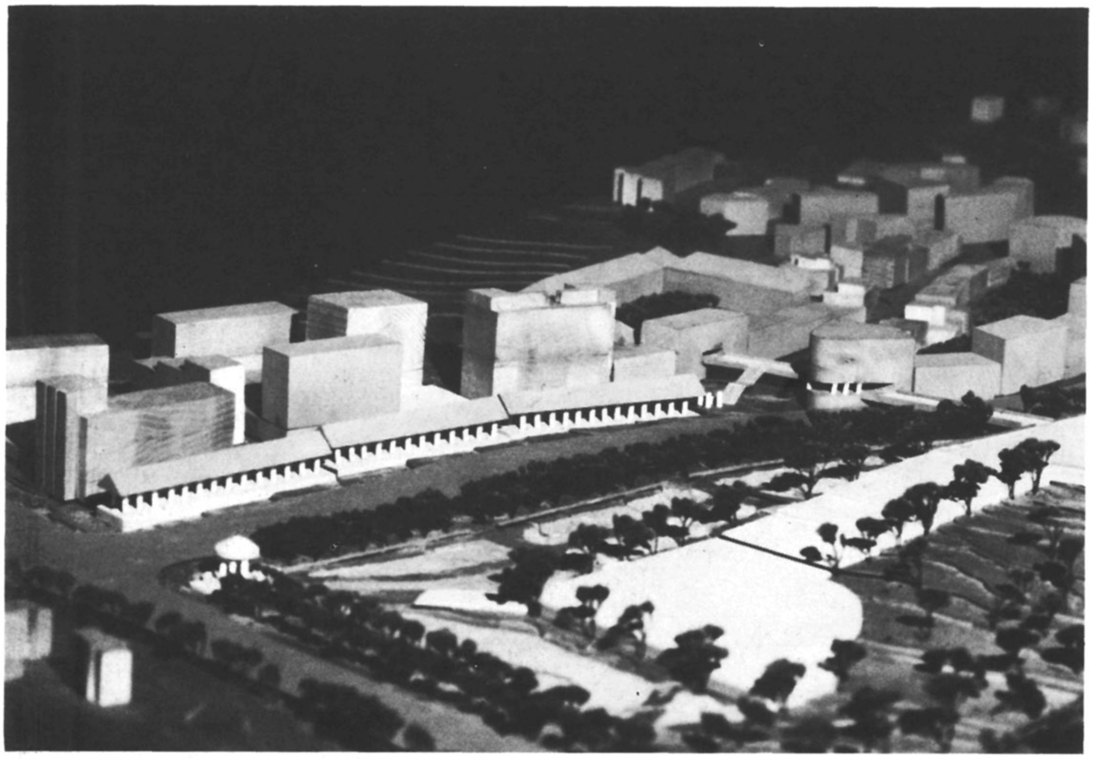

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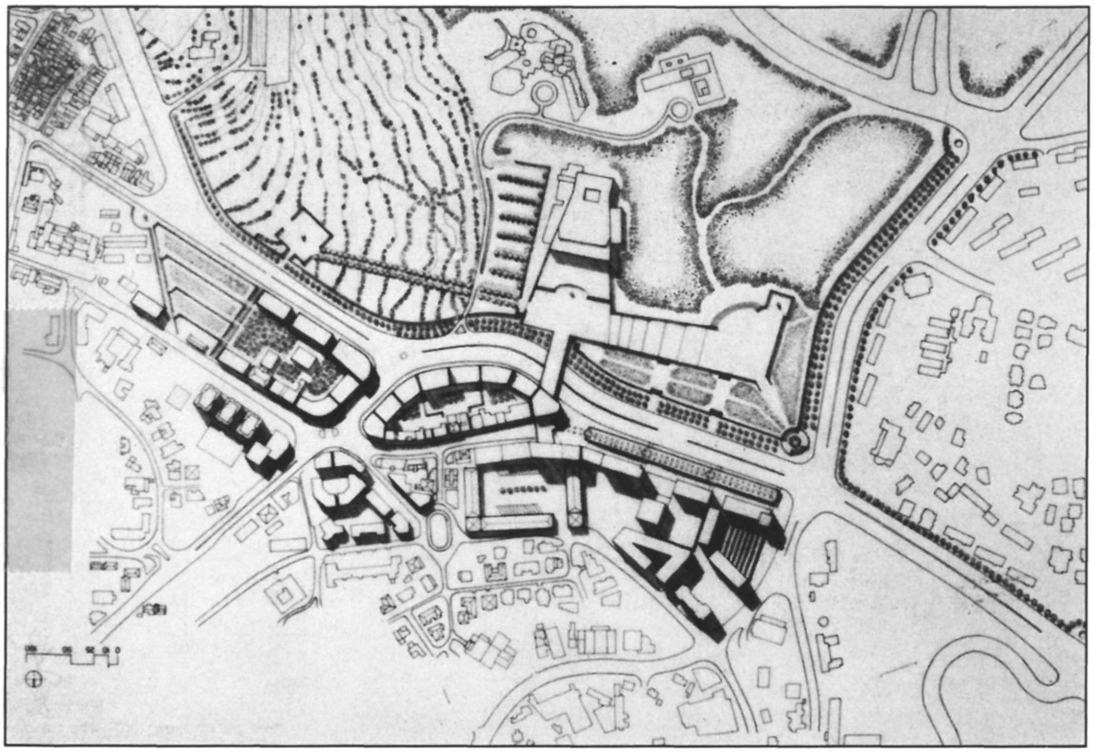

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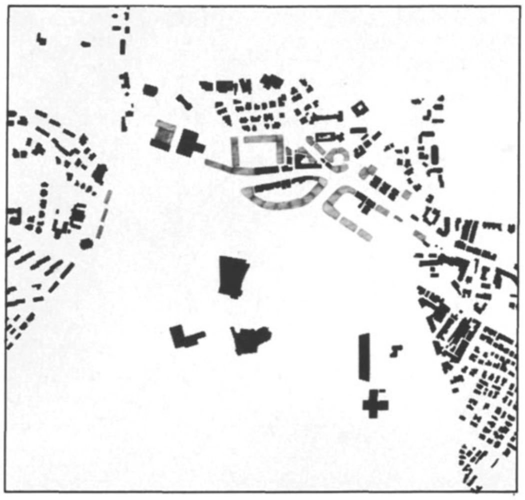

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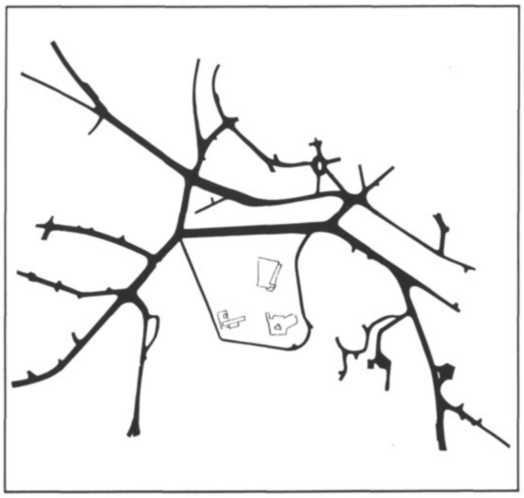

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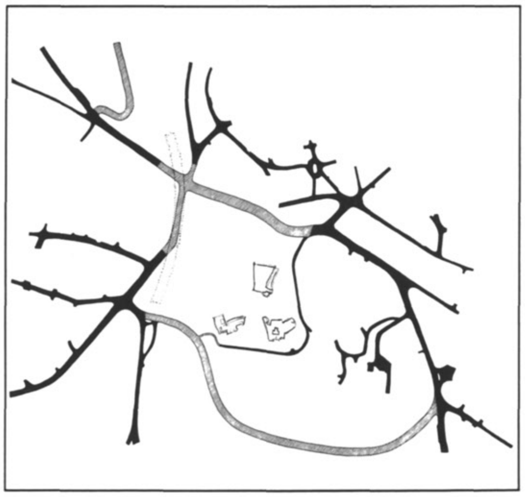

**5.58** *Model of view of commercial development and convention center along the proposed new rerouted western entrance (Pellet, Leprette).*

**5.59** *Plan of western entrance by Leprette and Pellet with the new rerouting of the road system.*

**5.60** *Existing urban fabric at the western entrance (Pellet, Leprette).*

**5.61** *Existing traffic (1983).*

**5.62** *Proposed traffic pattern (Pellet, Leprette).*

**5.63** *Model of proposal by Bremenstul and White.*

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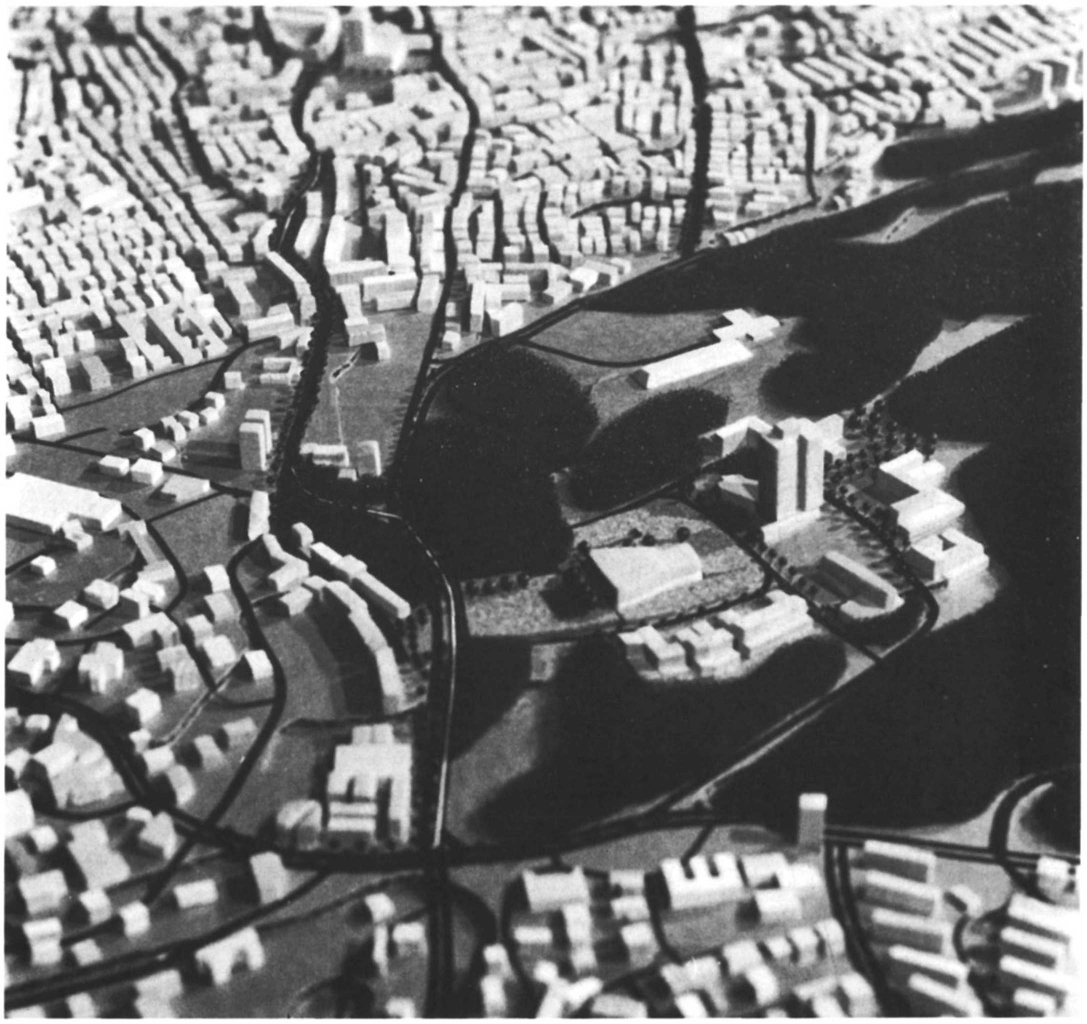
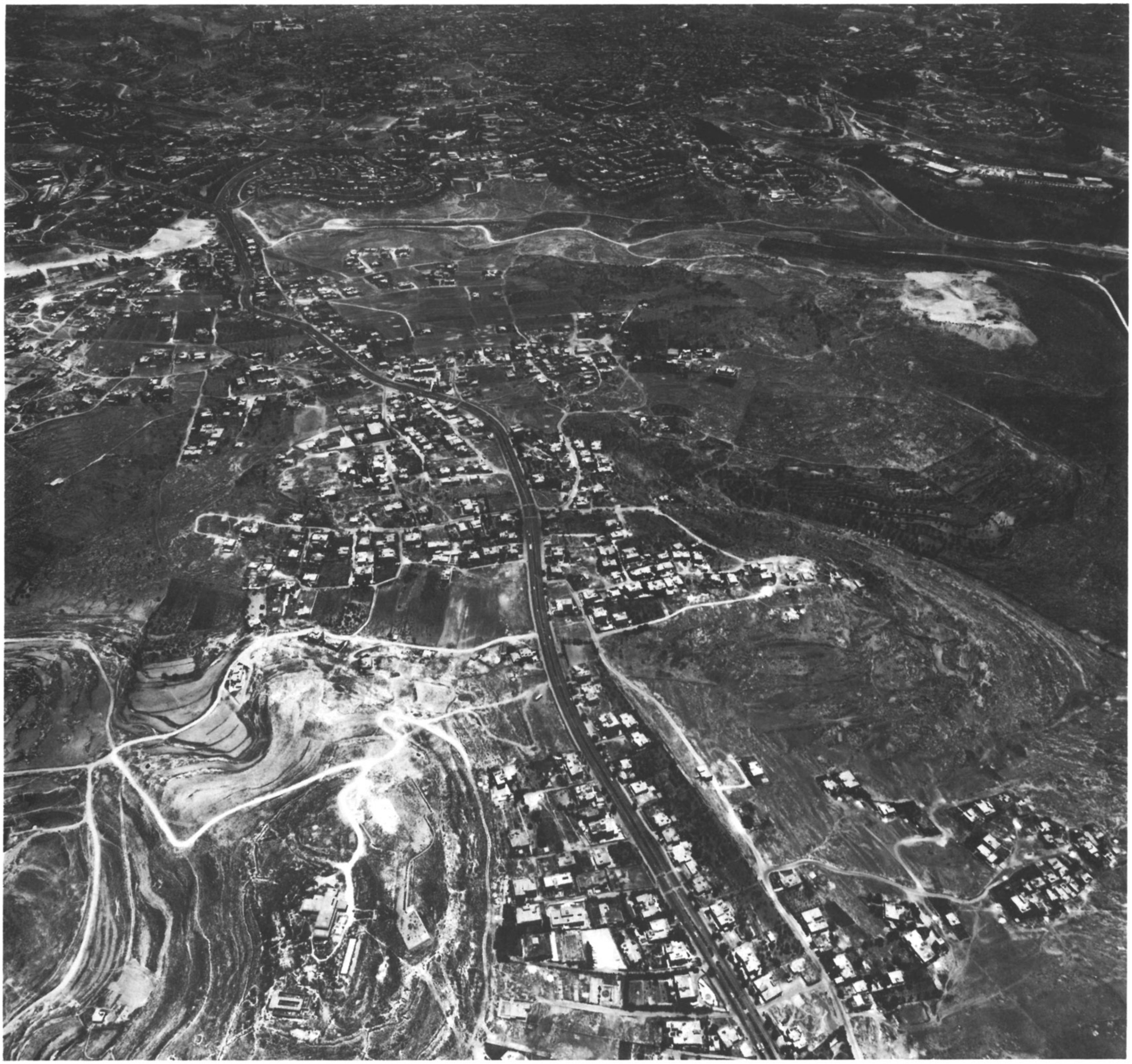


## CONCLUSIONS

The downtown studies showed that for the next several decades, the area could be consolidated and improved and provide as well for Jerusalem's growth. Effective retailing and some facelifting could change the image of the city. The studies also demonstrated that concentrated public action would be necessary to bring this about: first, in the improvement of the road system and the provision of parking, which could not be financed by the private sector; second, in the assembling and packaging of land, which, due to the extremely complex small-scale ownership pattern, is impossible to develop effectively. Finally, urban design guidelines with an effective review process are needed to ensure that the individual development of parcels connects to and complements the adjacent ones. These design proposals can serve as a basis for the preparation of a comprehensive downtown renewal plan.

6.1



# 6 THE NORTHERN REGION

In looking at the entire region, faculty and students were confronted on one hand with mounting evidence of impending change and on the other by official plans, some about to be implemented. Faculty and students obviously had to accept the newly constructed satellite towns as a *fait accompli* and therefore focused their energy on examining the policies for new development which would begin to connect and consolidate the disjointed parts of the city. But the existing satellite towns were only part of the problem. At the beginning of the studies, a new wave of development was launched by the government. Extensive tracts of land in the northeast section of Jerusalem were expropriated and plans were underway to construct a series of new communities which would link the neighborhood of Neve Yaacov near the Jerusalem airport on the northern boundary of the city with Mount Scopus and French Hill. To serve this new development, two new major north–south routes were proposed. Route 1, an arterial highway, would run from the city limits in the north into the Damascus Gate triangle and would be one kilometer east of Ramallah Road. This highway would also connect to the planned new expressway linking Tel Aviv to Jerusalem, replacing the existing highway located further south. A neighborhood arterial, Road 13, would be routed through the communities east of Route 1. Three east–west arterials would then link roads 13, 1, 4 and Ramallah Road. Route 4 is the north–south route planned as a Jerusalem bypass linking the cities to the north (Ramallah and Nablus) to the cities south (Bethlehem, Hebron, and Beersheba) through Jerusalem's west-end neighborhoods. The proposed plans raised a number of questions vital to the future of the city.

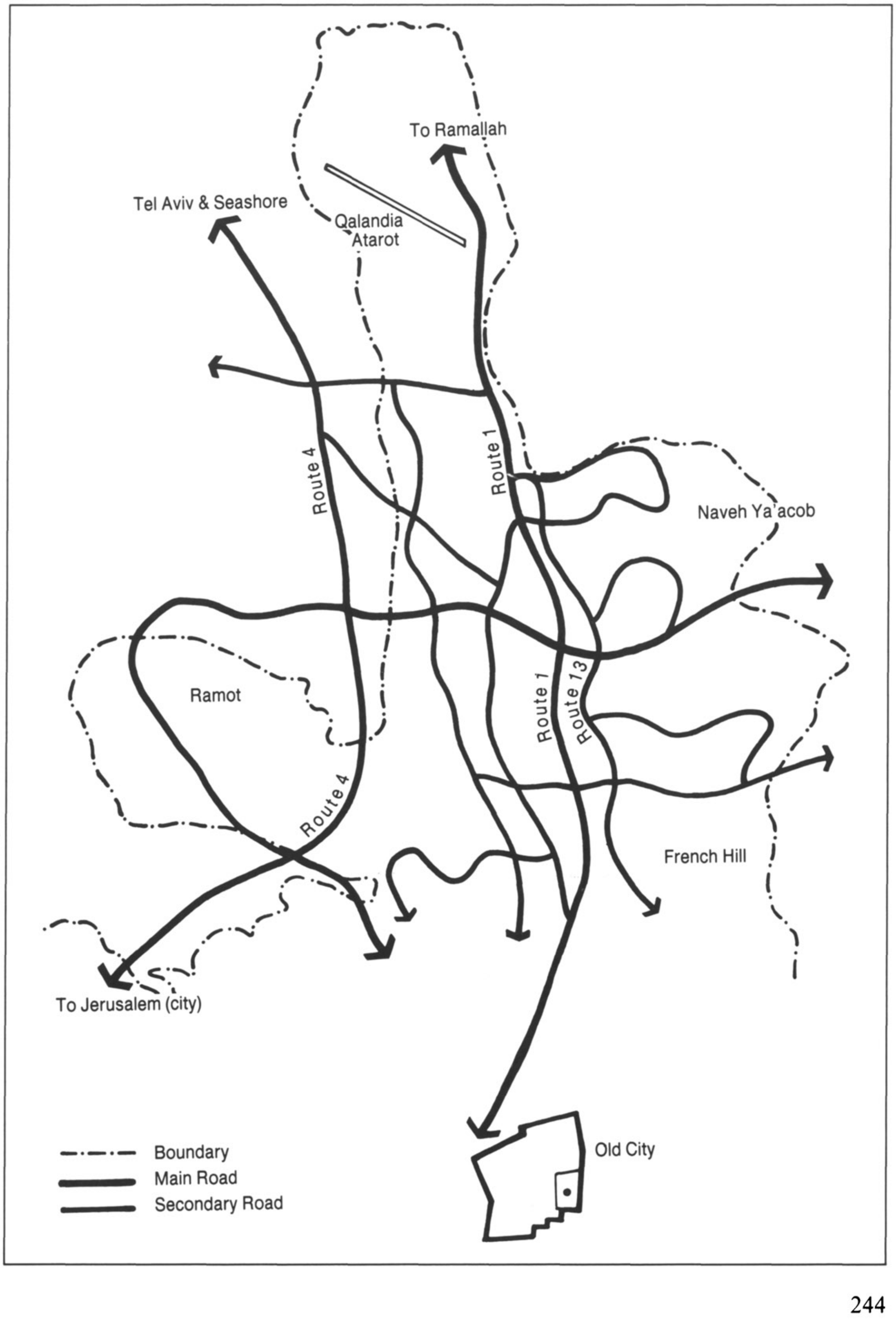
1. Was a proposed alignment of the roads optimal from the point of view of landscape (cut, fill, views, etc.)?
2. What were the political motivations and social-political impact of constructing two new roads running north-south, thus making Ramallah Road an Arab route, having Road 13 serve primarily a Jewish population, and making Route 1 a regional arterial, poised between the two communities? While Route 1 and the three east–west roads that crossed it were being promoted by the city planning department as a link between the Arab and Jewish communities, faculty and students were concerned that it would separate and divide the communities.
3. What type of development would best accommodate the population's needs, considering the particular conditions of the terrain, life-style, and densities? Were different solutions required on the eastern slopes, the arid hills fronting the desert of Judea, as compared to the fertile agricultural terraces sloping toward the west?
4. How should the city edges be defined? What should be the alignment and character of the edge between built land and desert to the east and agricultural lands to the west?
5. What areas should be preserved as open space and parks, and how might this network of parks become an effective amenity for the communities?

## METHODOLOGY

**6.1** *Aerial view of the northern region. In the center is Ramallah Road, leading to the Old City in the upper left corner.*

The issues confronting the region of Jerusalem seemed so vast and complex that it was difficult to comprehend a procedure by which faculty and students could begin coping with them. Toward that end, Carl Steinitz led two studios of landscape, urban design, and architecture

6.2



**6.2** *Schematic key map with road system as proposed by official planning authorities.*

students, who studied first the northern and then the southern region of the city. Their methodology consisted of a number of prescribed steps designed to demystify the questions on hand, to organize issues, and to help faculty and students develop specific proposals and policies, as well as to assess existing official plans.

The first step consisted of site visits carried out during the stay in Jerusalem. The students executed a number of visual surveys. For example, the proposed routes for major highways were actually traversed by car and by foot, with key points photographed. The edges of existing settlements and villages were studied and recorded. Observations were made of existing plant life and the character of the terrain.

When they returned to Cambridge, the students constructed a very large topographic model of the entire region. The cardboard model was made to the scale of 1:2000. To facilitate the enormous task, the region was divided into sections representing one square kilometer (fifty centimeters on the model itself). Each team constructed several sections of that model. Using information from aerial photographs, they placed vegetation on the models. Similarly, existing settlements and villages as well as new communities were constructed from pieces of wood.

The next step was to map on celluloid sheets information relevant to the study. Separate sheets were prepared to indicate the steepness of the topography, vegetation conditions, sunlight access, views, and proposed roads.

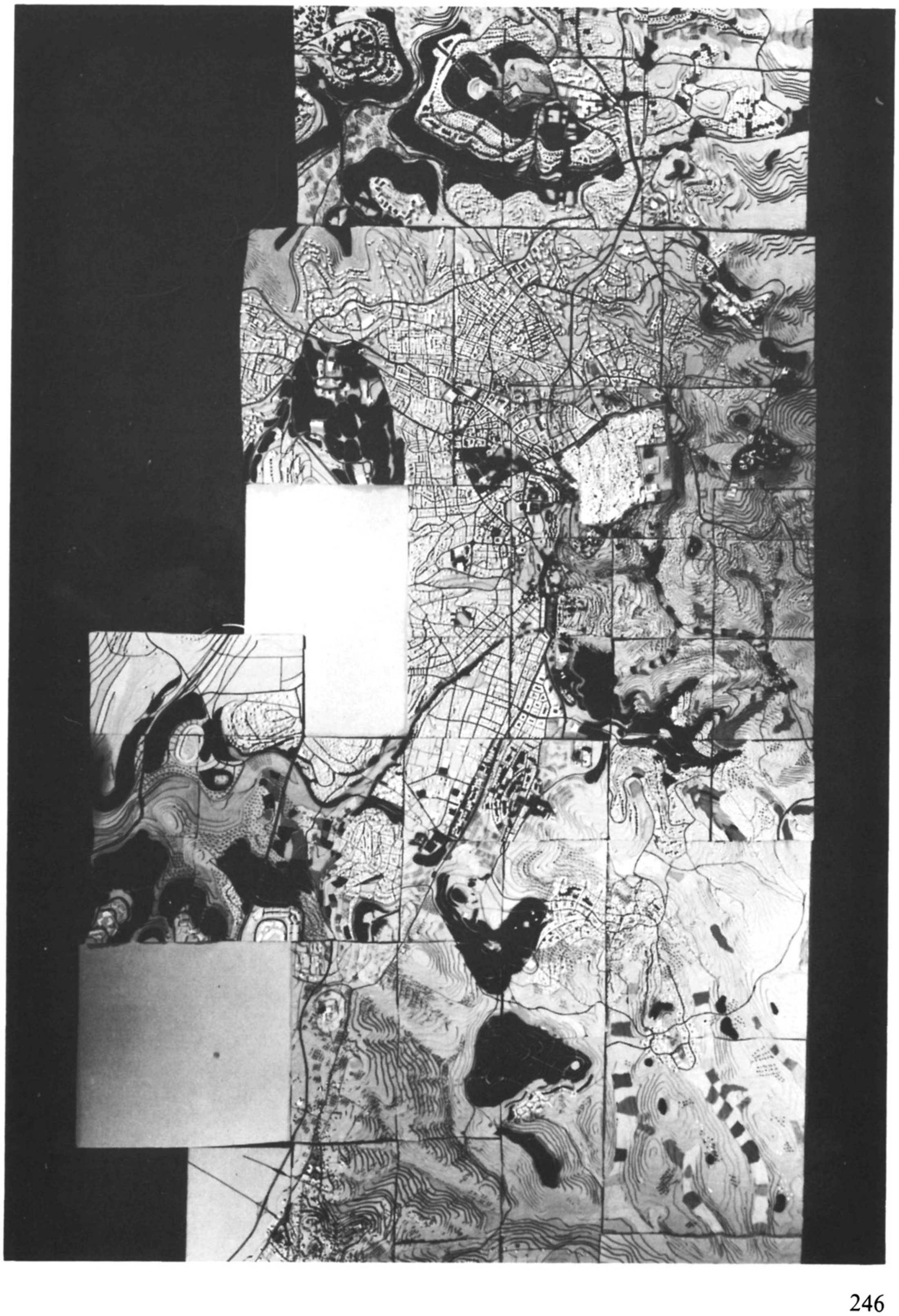
Steinitz devised a procedure by which the large model was attached in sections to a wall and the map transparencies projected so as to fit precisely the same scale on the model. Thus the two-dimensional information put on the separate data file maps took on a three-dimensional reality and could be critically examined. It was most effective for assessing proposed highway alignments.

The mapping of information and the three-dimensional examination led to certain conclusions. Some areas, such as those with moderate slopes and good sun and views, were designated as more buildable than others. Other areas were designated as unbuildable because of steep slopes, poor orientation to the sun, or prevailing winds. Still others, particularly valleys and hilltops, were slotted for specific study. The general approach was to designate valleys as open space, a policy that had begun to emerge in recent decades. Similarly, the age-old tradition of placing important institutions on the hilltops prevailed, though in several cases they were designed as important public recreation spaces.

The next step in the procedure was for each team to develop a series of specific recommendations concerning road alignment and the location of new neighborhoods on the unbuilt lands. These dealt with both the expansion and consolidation of existing settlements and the introduction of new ones to the area. Concurrently, the nature of the development, that is, the building types, density, and placement on the site, was also explored. By studying both the sites and the proposed densities, the students could project the anticipated population and its service requirements.

The proposed schemes were transferred to celluloid sheets and once again projected onto the models. Now it was possible to assess critically not only the official plans, but also the specific proposals of each team. Once evaluated and revised, the proposed plans were physically constructed on the models. Since several teams worked on the same areas, duplicate sections were prepared, and proposed roads and highways, buildings, parks and forestation were all constructed from the same materials so that the different models were compatible. It was possible to insert a particular proposal into the overall model and examine it in the context of the entire region.

6.3



**6.3** *Assembled segments of students' models of the northern and southern regions. Model of the Old City is in the center (approximately one kilometer by one kilometer).*

Once the highway system proposed by a team was constructed on the model, a new study was carried out to assess more precisely the actual experience of driving along that route as it entered the city and as it traversed the Old City. Using a camera attached to a modelscope, which is a device like a periscope that can give the viewer a ground-level view, the students took a series of photographs at key points along the route within the model. The actual experience of driving, the opening and changing of views, was presented in a series of photographs. Analysis of these made it possible to critically assess the routes and to improve them. Similarly, studying sectional drawings of cut and fill within the topography led to determining the optimum alignment from the point of view of minimizing modification of the natural terrain.

Working on the northern part of the region, each team produced an overall plan with a number of components. Each had specific proposals for the alignment of the principal routes of the region; for areas of urbanization and open spaces; for the locations of secondary and neighborhood centers, institutions, and other regional facilities; and for the fabric of neighborhood development, including building types, internal roads, and public spaces.

As will be demonstrated later in this chapter, it became clear that the specific road proposals generated by the Steinitz studio considered with great care and sensitivity the form of the land and the impact on it. This was not so much the result of an inventiveness or conception superior to the official planners, but rather of methods and tools that enabled the students to achieve a much better fit between the road system and the land. This would not only prevent the familiar eyesores of cut and fill for highways — which permanently scar the landscape of Jerusalem, indeed all of Israel — and the consequent expensive infrastructure and retaining walls, but would also assure that each roadway would accomplish its goal. The absence of methodological evaluation of the network actually called into question the basic hypothesis of the official plans.

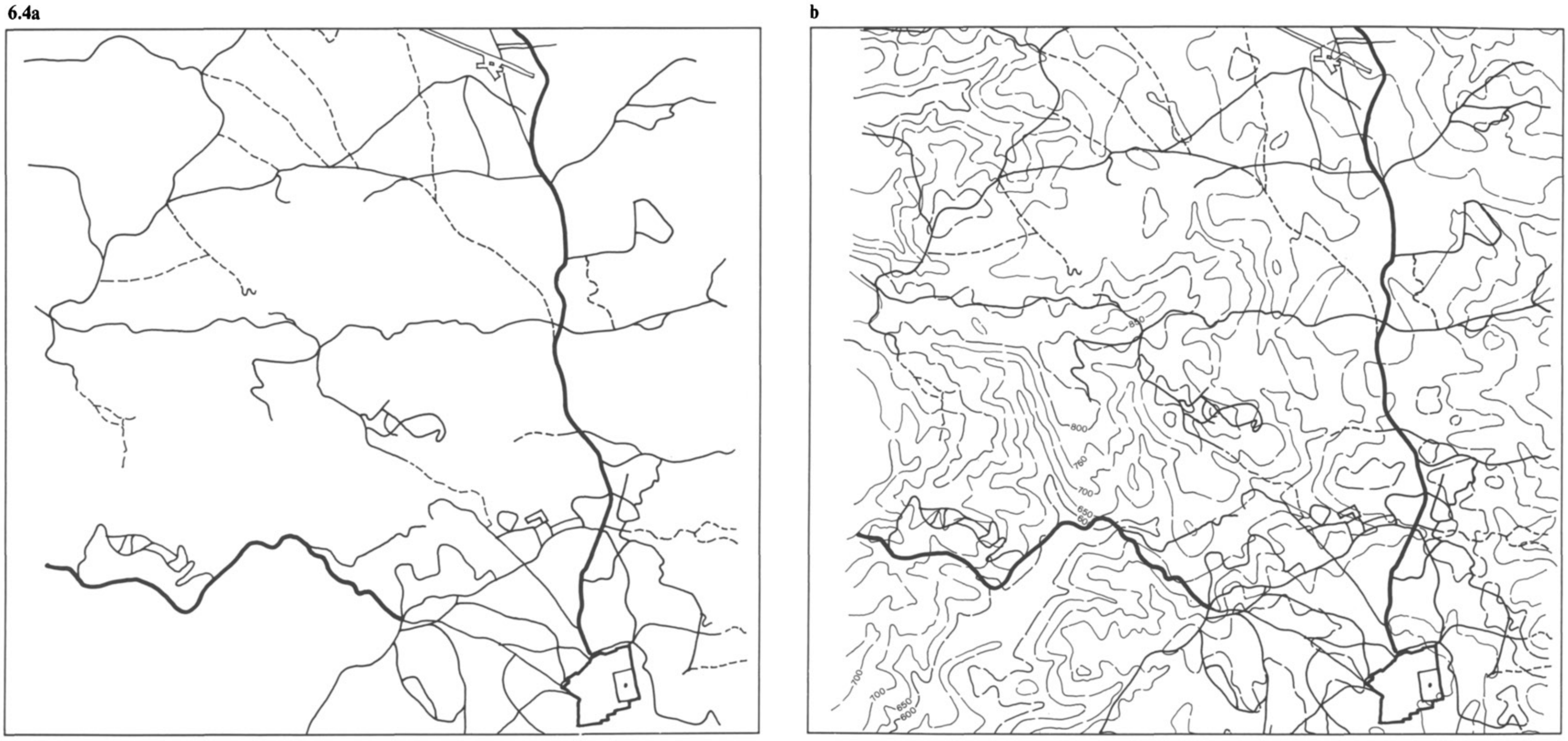
Thus, for example, when the city engineer spoke of Route 1 as a connector between the Arab and Jewish communities located on either sides, he was making a statement in good faith. He assumed that the proposed highway would take on the character of an urban boulevard with buildings fronting it. Had he had available to him the kind of three-dimensional studies in models and drawings of the Steinitz studio, he would have had to face the fact that the relationship of the road to the land and the enormous cuts and fills that it entailed would make the realization of his vision unfeasible. Thus the Steinitz studio proved that when developing regional plans, roads, land uses, and building patterns for new areas in the city, particularly when topography is complex, procedures to assure the investigation and exploration of the impact of such proposals are necessary. The studio focused on the development of such proposals on virgin land, but the same procedures are even more applicable in urbanized land, where the impact is not only on the land but also on the existing neighborhoods and various sectors of the city.

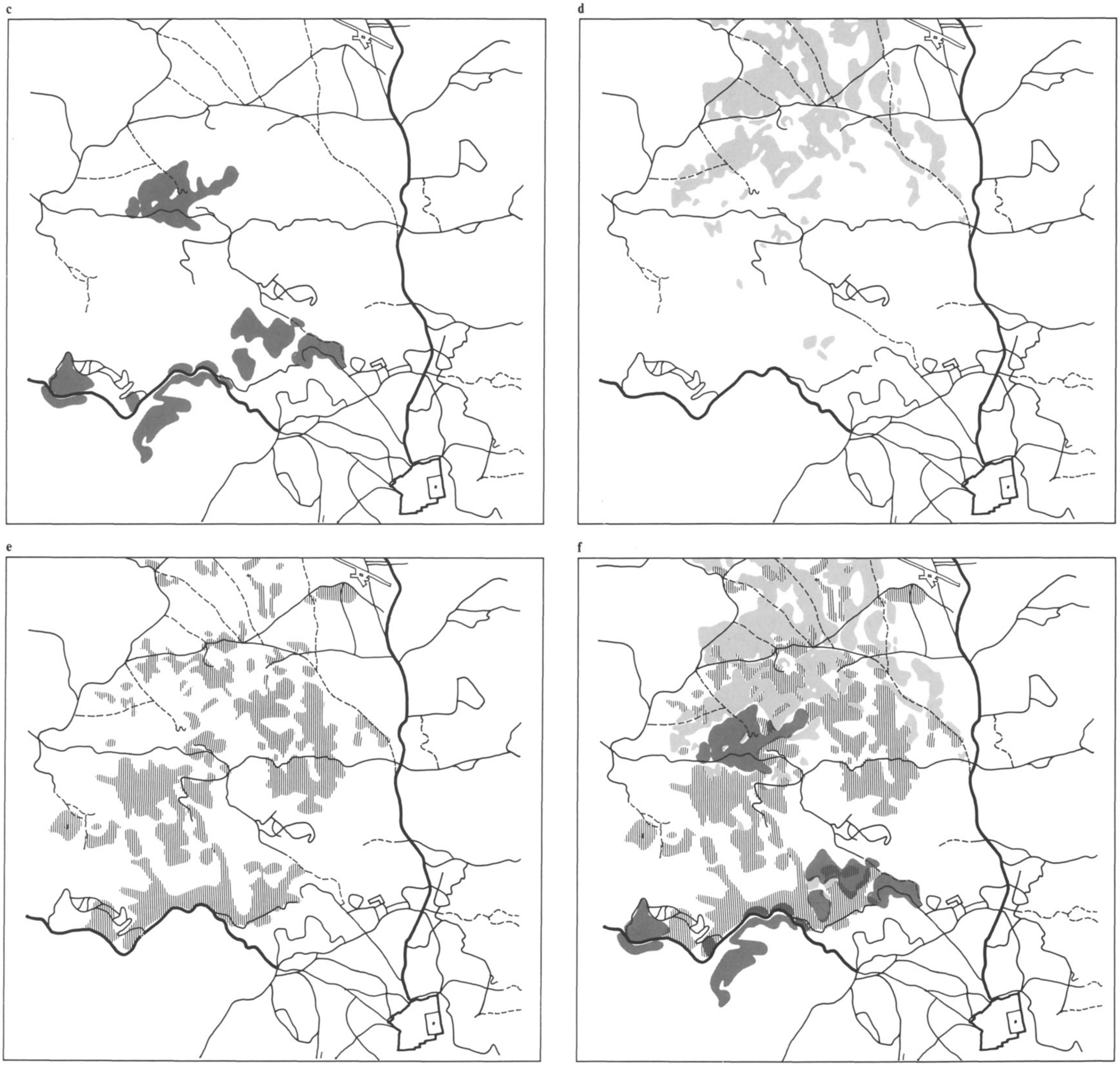
What then is to be done in Jerusalem, where expediency, pressure of time, lack of resources or appropriate manpower, and sometimes even neglect, lead to the development and implementation of plans that have not been thoroughly explored? The faculty concluded that in-depth investigation of these plans would be forthcoming only with procedures required by law. The methodology developed by Steinitz is an excellent foundation for such procedures. At least it would develop information that professionals and laymen could "read" so as to understand the full implications of a proposal.

In the 1950s and 1960s the United States had a similar problem. The interstate highway program was implemented with inadequate investigation into the physical and social impact of each roadway. Consequently, the Environmental Impact Statement, which spells out certain exploratory studies and public hearings that must precede the implementation of a plan, was mandated by law.

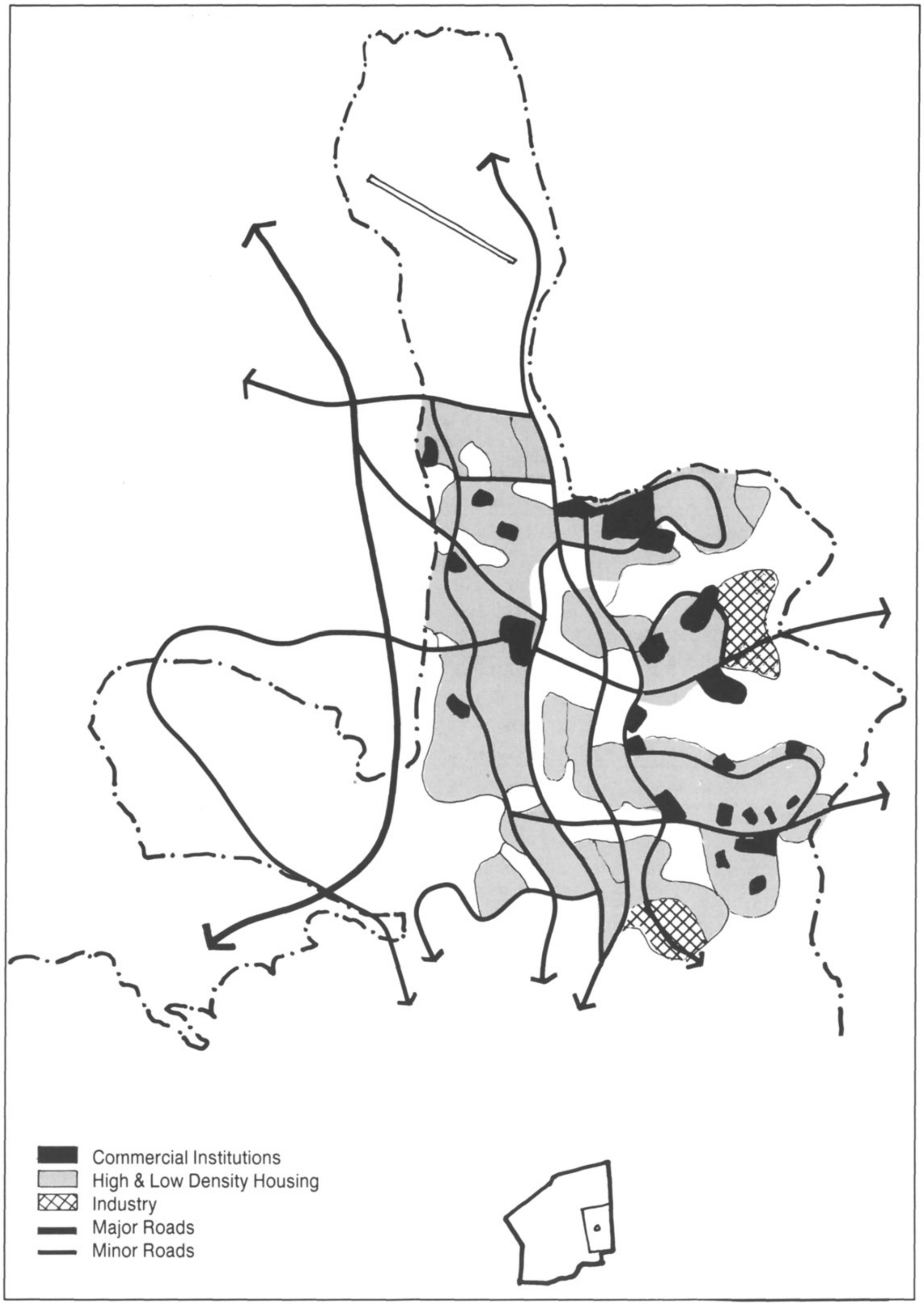
The environmental Impact Statement procedures in the United States have now been in practice for well over a decade and might be an appropriate starting point for developing mandated procedures for Jerusalem. While we speak here of mandated procedures for Jerusalem, it is clear that since Jerusalem planning falls under the general Israeli planning law of 1968, any such procedures would have to be introduced throughout Israel. The only way to demand more strict procedures in Jerusalem than in the rest of the country, if that were considered desirable, would be to single out the Jerusalem region and make it the subject of a particular amendment to the Israel planning law (a capital district).

**6.4** *Components of the descriptive analysis of the northern region, documenting some of its physical characteristics: a. road system; b. topography; c. forestation; d. agricultural fields; e. orchards; and f. superimposition of all components.*




c
d
e
f

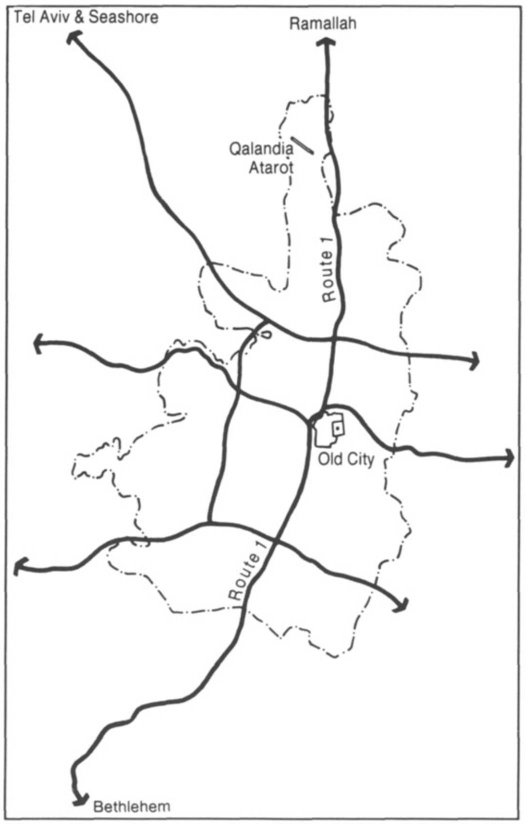
**6.5**


■ Commercial Institutions
▨ High & Low Density Housing
▨ Industry
Major Roads
Minor Roads

**6.5** *Municipality outline scheme for the development of north Jerusalem, 1981 (source: Planning Guidelines February 1981).*

**6.6** *Schematic illustration of the major existing urban corridors in Jerusalem. Route 1 from Ramallah to Bethlehem through Jerusalem runs entirely on Jerusalem's main watershed line.*

**6.6**



## THE SPECIFIC PROPOSALS

### *The Highway Network*

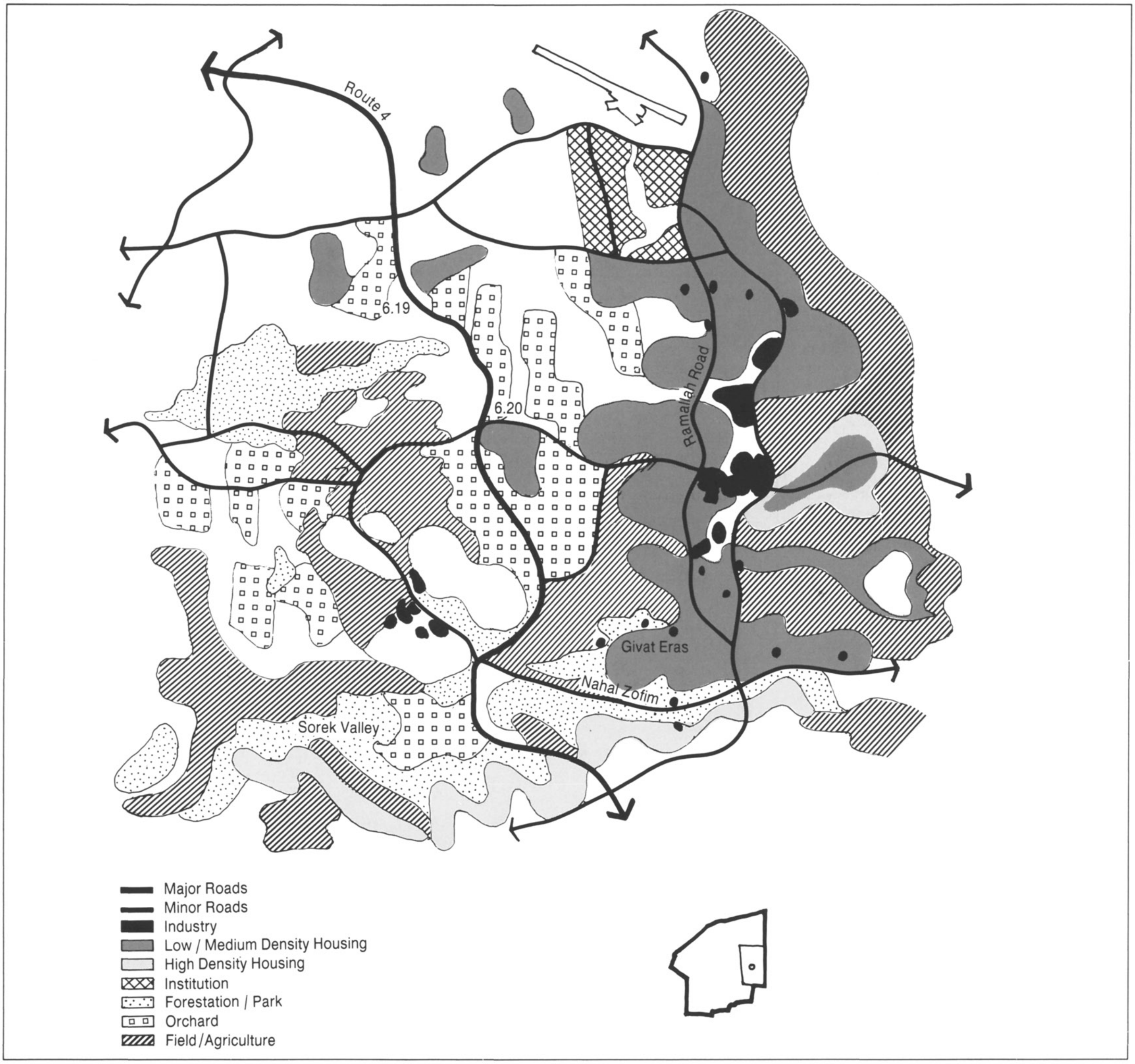
Since Route 1 was proposed as the principal arterial and the gateway from the north and from Tel Aviv, its specific alignment and character were the subject of intensive investigation. It was the consensus of the studio that, as designed, Route 1 would act as a barrier and separator between the Arab communities to the west and the proposed Jewish communities to the east. (Here was an interesting reversal. Through the whole city, the Arab population was located to the east, the Jewish population to the west. North of Mount Scopus, this pattern reversed, with the Arab villages of Beer Nabala and Beit Hamina, etc., located west of Ramallah Road and French Hill, Naveh Yaacov, and the newly proposed neighborhoods of Ramat Zeev east of that road).

The conclusion about the divisive nature of Route 1 derived from both its specific design and alignment. The road had been designed to the standards of a regional highway, with slopes not exceeding five percent and turning radii accommodating 90-km.-per-hour traffic. The resulting highway necessitated cuts in the landscape up to ten meters deep and, in other areas, fill above the existing terrain. The city planning department promoted the road not as a highway but as an urban boulevard with intensive development on both sides. This would become, it was said, the *main* street of northern Jerusalem. A detailed examination by the students, however, revealed that such development was more fantasy than reality. How would new buildings relate to a street when, in some cases, the adjacent land parcels are fifteen meters above or fifteen meters below the road itself? Highways of this kind did not, by their very nature, make for convenient development. Thus the notion that "main street" would attract Arabs from the west and Israelis from the east lacked credibility.

The students' response was to propose several major revisions to the highway system. The team of Christian Gilot and Carol Tanski replaced Route 1 with a neighborhood scale road and relocated the regional north–south arterial to the east (see below). Another team downgraded Route 1 and proposed that Route 4 to the west carry the regional traffic. The projected statistics for the traffic loads on these routes were assessed by the students as well as by the workshop carried out at the Kenedy School of Government. While no consensus was reached on these traffic projections, inclination was to doubt their reliability.

The realignment of the proposed roads was motivated not only by the negative impact of Route 1, but also by a vision about what might constitute the most effective route of entry to Jerusalem from the west and north. The team of Azra Hameed, Jules Loweff, and Cynthia Rice proposed the realignment of Route 4 to follow the biblical route of entry to Jerusalem — passing by the monument of Nabi Samuel, crossing the valley at Ramot, and then forking, with one route entering the city from the east and then turning south through the Sorek valley and the other heading south toward Bethlehem. Another team — Isabel Mancinelli, Bartholomew O'Brien, and Thomas Woodfin — proposed extending the Tel Aviv route across the mountain ridge into the desert and then, rather than cutting through Jewish and Arab communities, running it across the slopes and valley of the Judea desert to Mount Scopus. There the team proposed a short tunnel, forming a gateway, that would pass under the Hebrew University campus. Upon emerging from the short tunnel, drivers would see one of the most magnificent and dramatic views of the Old City. The route would then descend into the Damascus Gate triangle.

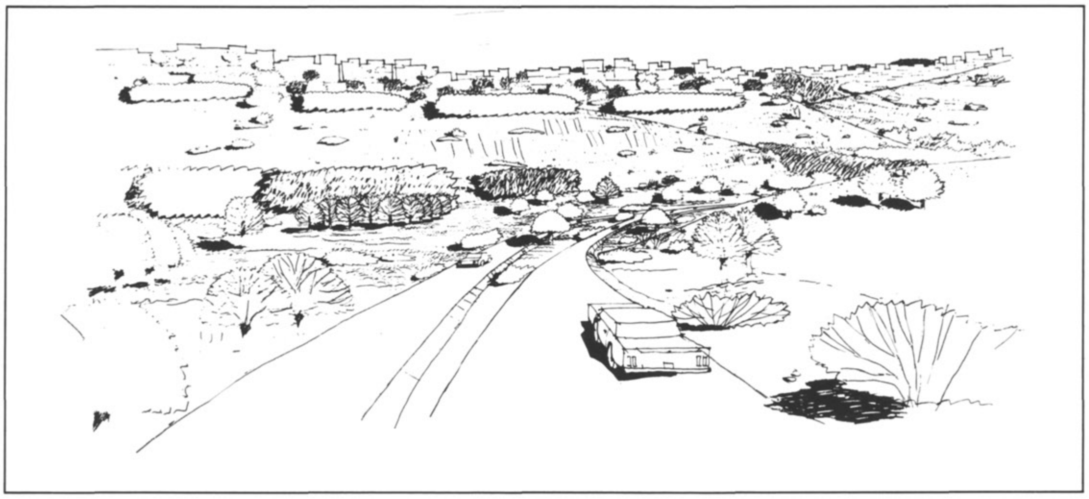
**6.7**


Route 4
6.19
6.20
Ramallah Road
Givat Eras
Nahal Zofim
Sorek Valley
Major Roads
Minor Roads
Industry
Low / Medium Density Housing
High Density Housing
Institution
Forestation / Park
Orchard
Field / Agriculture

**6.7** *Proposal by Elliott, Rex, and Wedlan continues the expansion of the Ramallah Road area. It recommends higher-density development on the three ridges to the east of Ramallah Road and locates a major new Arab and Jewish development on Givat Eras (once known as Stadium Hill). It also provides for a tiny road and park in Nahal Zofim. The entry corridor proposed in this scheme is a variant of Route 4 corridor proposed by the planning authority.*

**6.8** *Views from the road: Route 4 as proposed by Elliott, Rex, and Wedlan (a) first goes through the landscape characterized by valleys, terraces, and rocky slopes and then (b) enters the more urban area through the valley between Ramot and Ramallah Road. Givat Eras (c) has been maintained as an unforested zone, and the forest ahead marks the urban edge adjacent to the Sorek Valley. As one passes between Givat Eras and Ramot (d), the impact of the edge of the city is sharpened because of its location on the ridge surrounded by forest. Once the Sorek Valley (e) is crossed, one starts the final ascent to the city.*

**6.8a**



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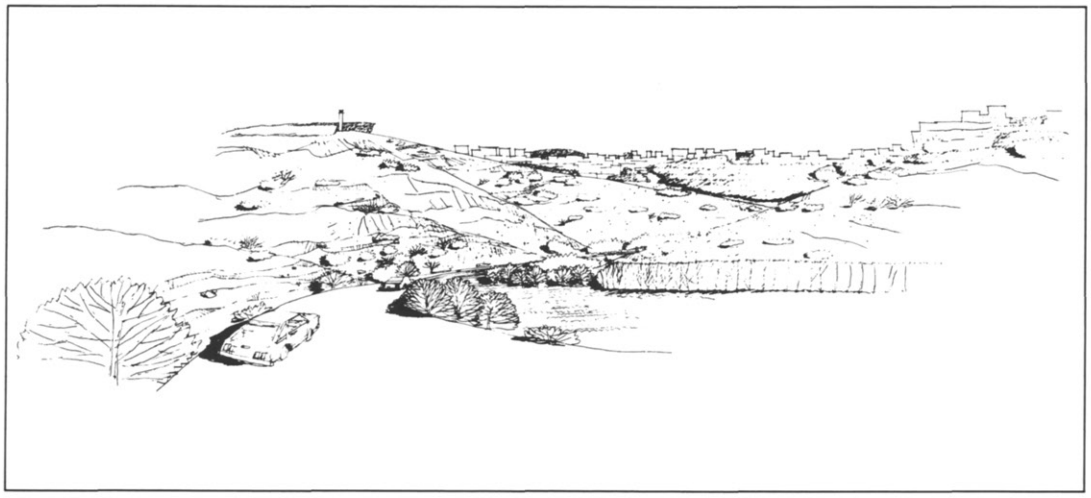

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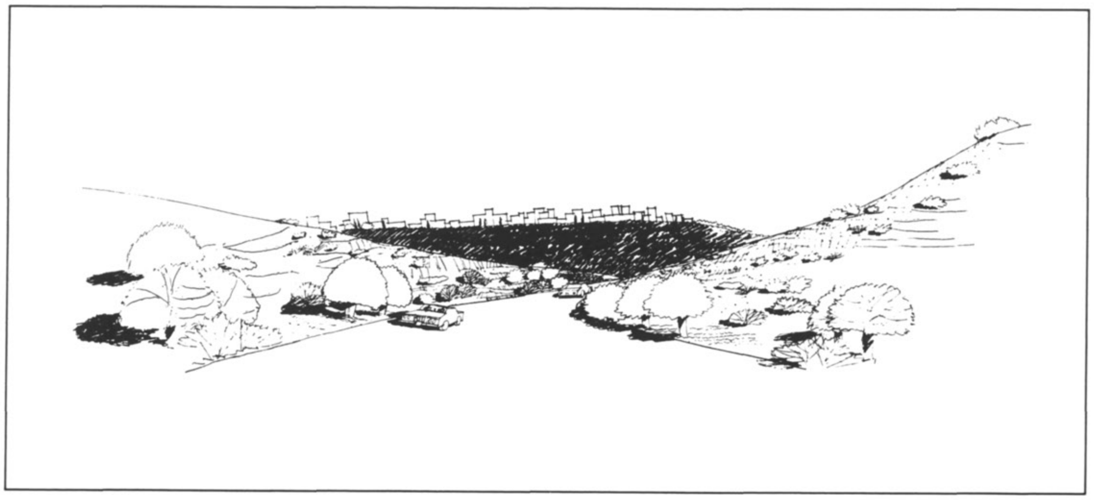

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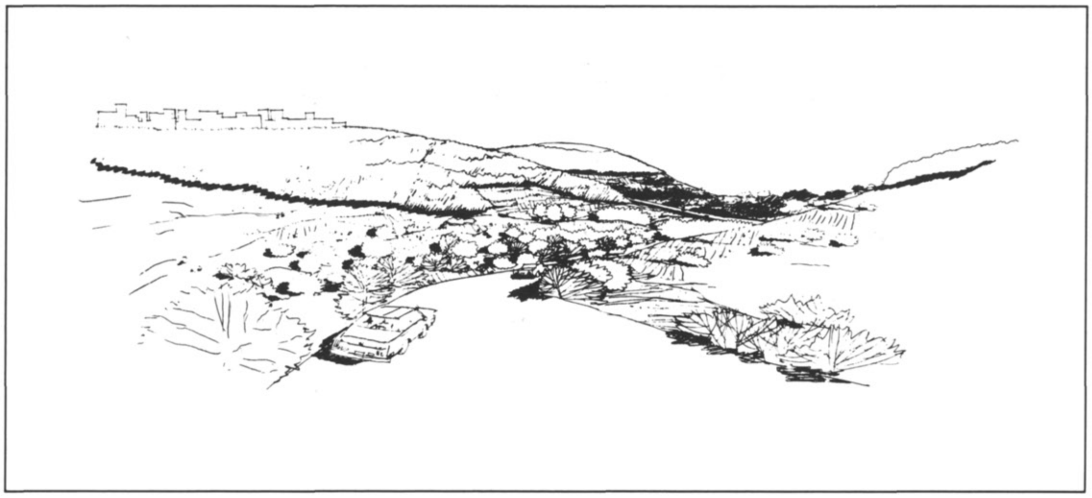
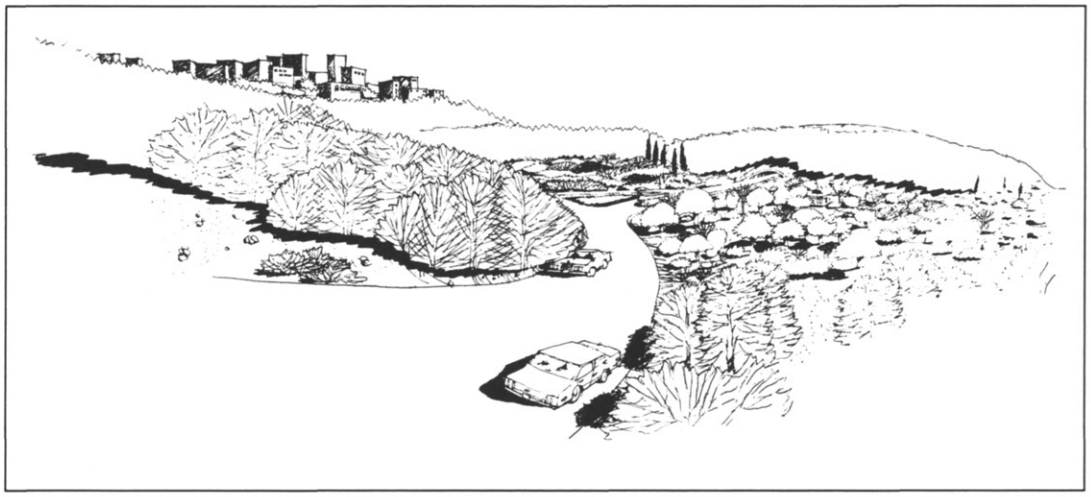
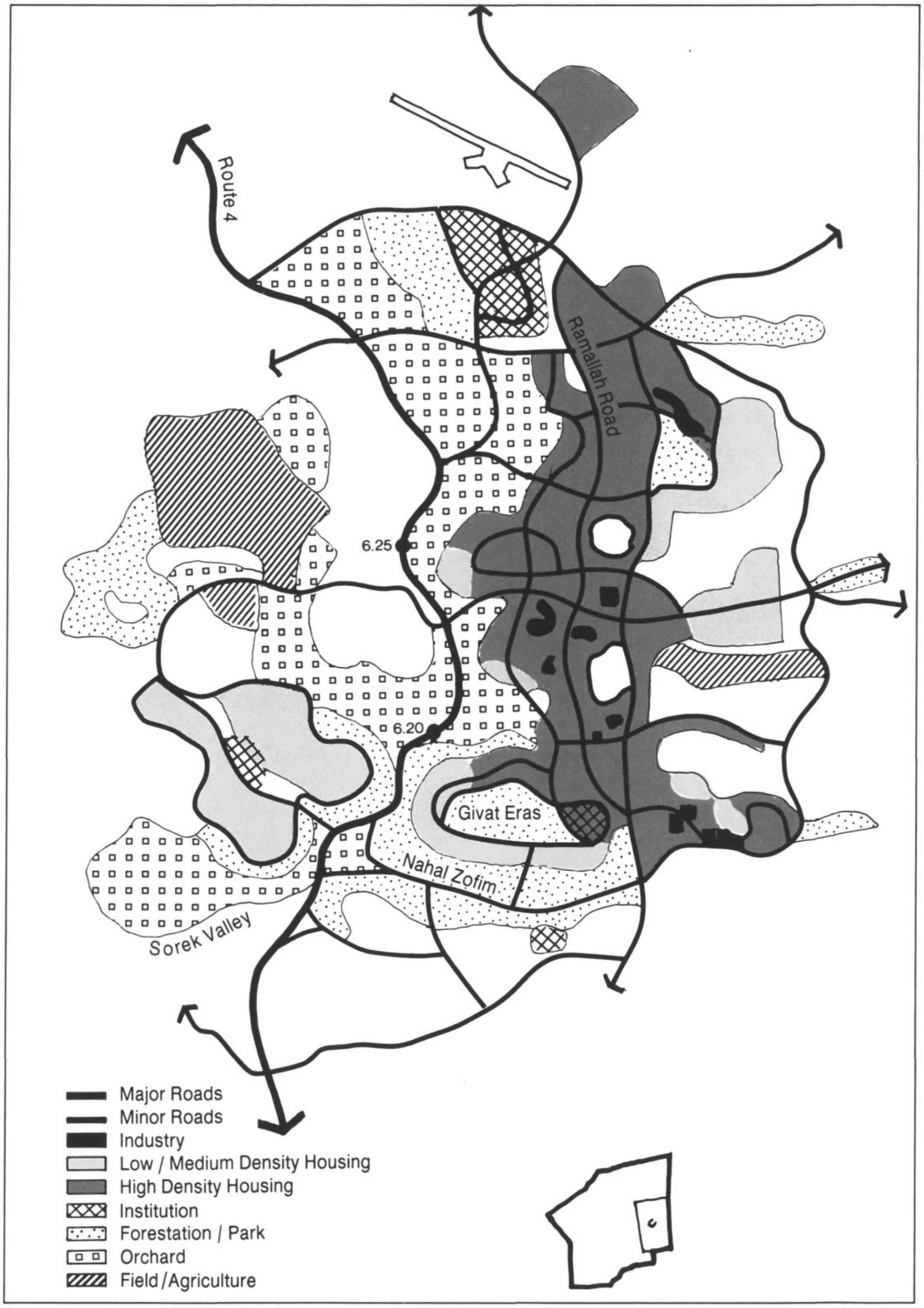


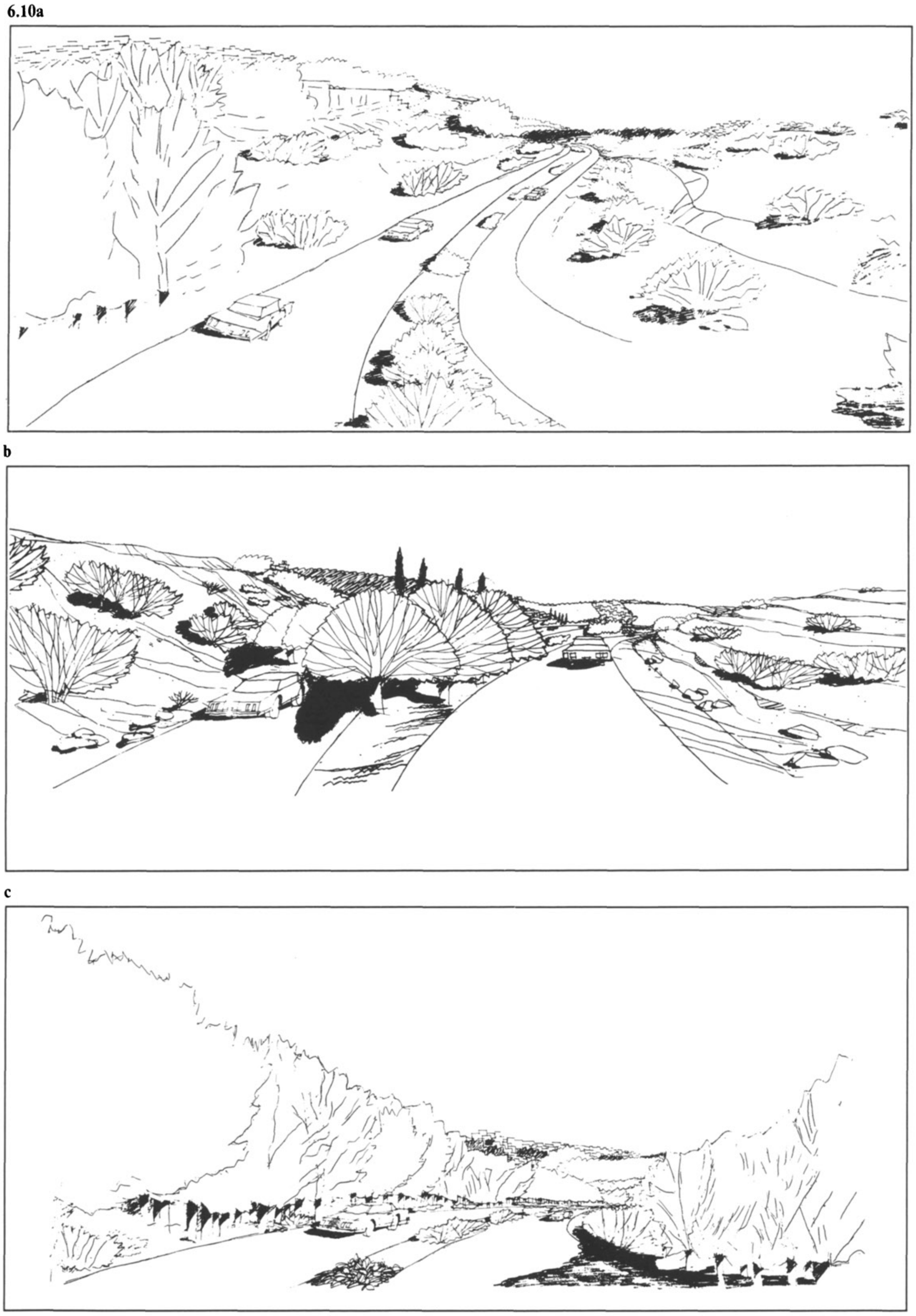
e



**6.9**

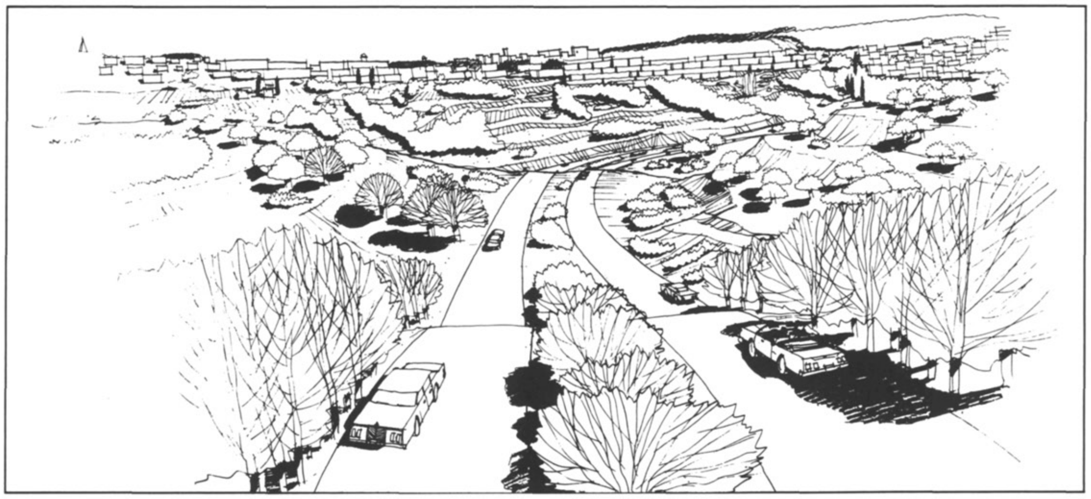


**6.9** *The scheme by Karasov, Runco, and Shetrit incorporates the official Route 4 proposal and concentrates growth along Ramallah Road. It sharply distinguishes development east of Ramallah Road from development west of it. In the west, it calls for housing that is visually and functionally linked to a forested landscape and for a landscape more integrated with the residential pattern. In the east, the desert landscape is brought into the city but is not used for housing. A sharp edge differentiates the residential pattern from the open desert landscape. The forest on the west is used to identify the entry to the city and marks major urban park developments in the valleys. The scheme correlates density of development and solar orientation in such a way that higher density is allocated to slopes with southern exposure (forty to forty-eight units per acre). The scheme proposes a large urban park in the Nahal Zofim Valley, a major regional park atop Givat Eras, and a major institutional core at the Givat Eras and Ramallah Road junction. Commercial centers are located at the top ends of valleys between Arab and Jewish residential areas.*



**6.10** *Views from the road: Route 4 as proposed by Karasov, Runco, and Shetrit follows the proposal by the planning authorities. It runs along the western edge of the Ramallah Road development (a) and through the Sorek Valley into the city. One gets a distant view of the development along Givat Eras and the arboretum at the top (b), which marks this as one of the entries to the city (c). The route then goes through a developed agricultural and terraced landscape, with the intense developments of Givat Eras and Ramot and their forest edges foretelling the place of entry (d). Then one passes through the narrow valley between Ramot and Givat Eras (e), and the plateau of Jerusalem atop of the mountain is fully exposed.*

d



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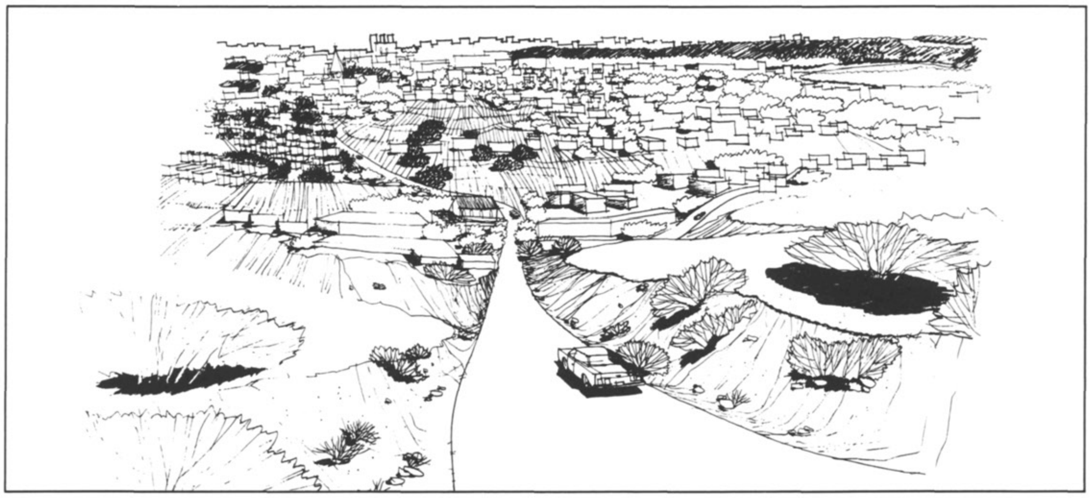


## *Extent of Urbanization*

Closely linked to the road designs were specific proposals for urbanization. Several factors were considered.

1. The preservation and non-urbanization of significant parcels were considered important. By consensus, the fertile agricultural terraces to the west, the olive groves, and other plantations were worthy of protection. The policy was to attempt minimal disruption of the areas, which still preserved their traditional biblical imagery.

2. The Arab villages were studied in detail. Their clustered organization and their delicate relationship to the topography were observed. It was recognized that these villages were under the constant pressure of expansion, especially to provide land parcels for the second and third generations of families in those villages. The designs explored how such growth could be accommodated with minimal disruption of the fabric of these villages.

3. The difficulty of creating an appropriate edge between open land and built-up areas led to several specific proposals.

4. Different patterns of development marked the Arab and Jewish communities and expressed the differing life-styles, needs, and economic structure of these communities. For example, Arab commercial development took the form of low-density strips along Ramallah Road. Rows of shops, with front parking, provided necessary services. There was also the tendency toward mixed uses; that is, buildings accommodating workshops below and residences above. Single-family houses were constructed in lots set back from the highway. Since access to these lots was through privately owned alleys, not public roads, public services such as sewer, water, garbage collection, distribution of mail — common in other parts of Jerusalem — were difficult to provide.

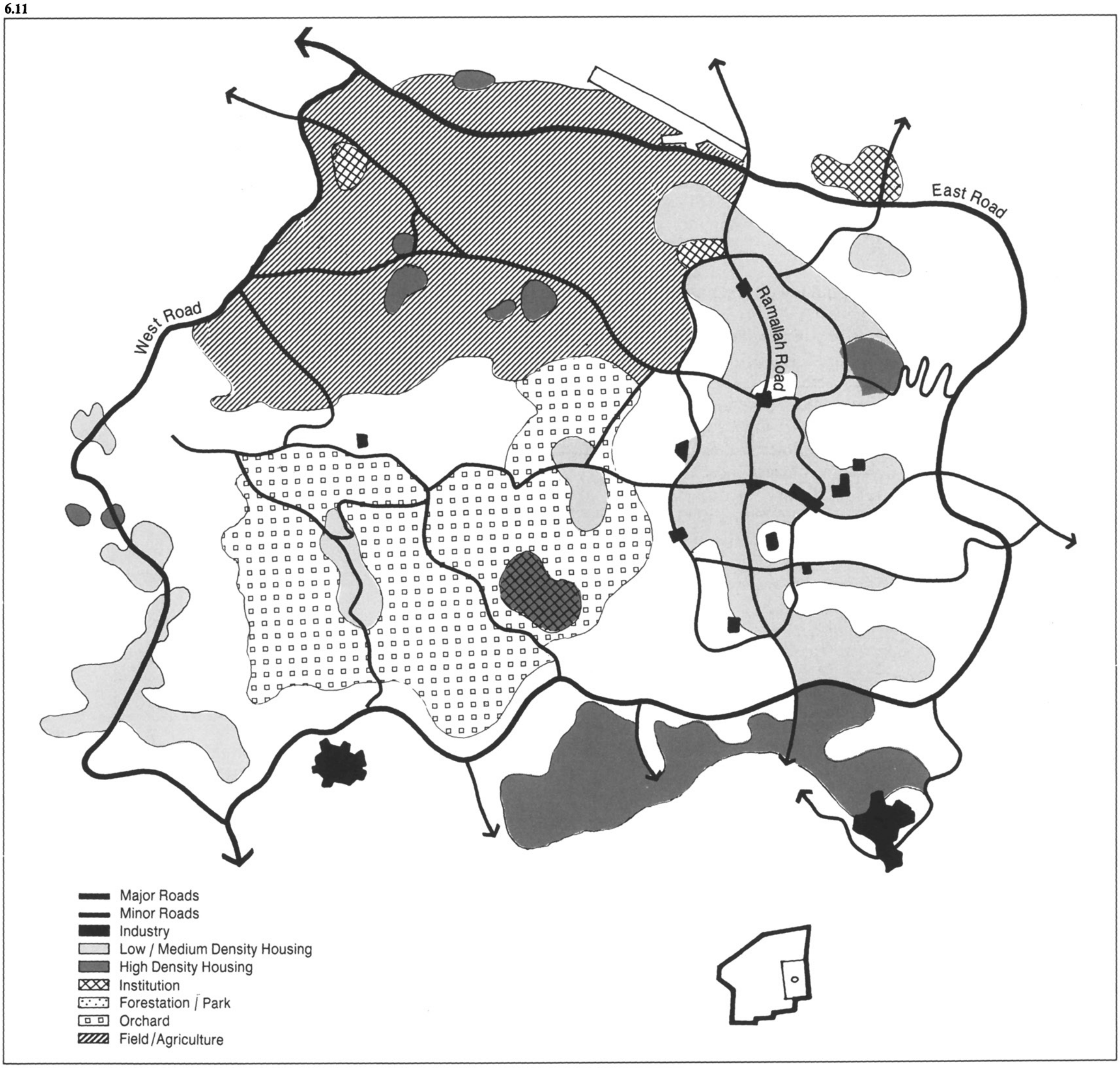
Housing types serving the Arab and Jewish populations differed dramatically. Most Arabs resided in single-family houses, detached or attached, that formed clan compounds. Almost all Jewish housing was constructed by big builders working for the Ministry of Housing. It consisted almost exclusively of three-, four-, or five-story apartment buildings, with a small portion of villas sprinkled here and there. But through their field trips to study housing trends and through interviews with residents, the students discovered that the prevailing patterns did not necessarily reflect desires. Many younger Arabs expressed a preference for apartment living (supposedly the Jewish prototype) and pointed to their popularity with families in neighboring Arab cities such as Aman or Beirut. In contrast, most Jewish families interviewed preferred a single-family villa to the Ministry of Housing apartments. Clearly, the divergent patterns of development were more the result of bureaucratic structure and development procedures, the availability of private versus public land, and the technology of building, than an expression of preferences.

Six specific proposals were developed for the northern region. As will be seen, some teams took the position that urbanization of the north should be less than that proposed by official plans and that the maximum population projected for these areas be somewhat lower. This was due to two factors: the desire to preserve certain open spaces from development, and the conclusion that the average density in the Jewish communities, currently eight units per dunam gross, should be reduced to allow more ground-attached clusters of housing and fewer tall apartment buildings.

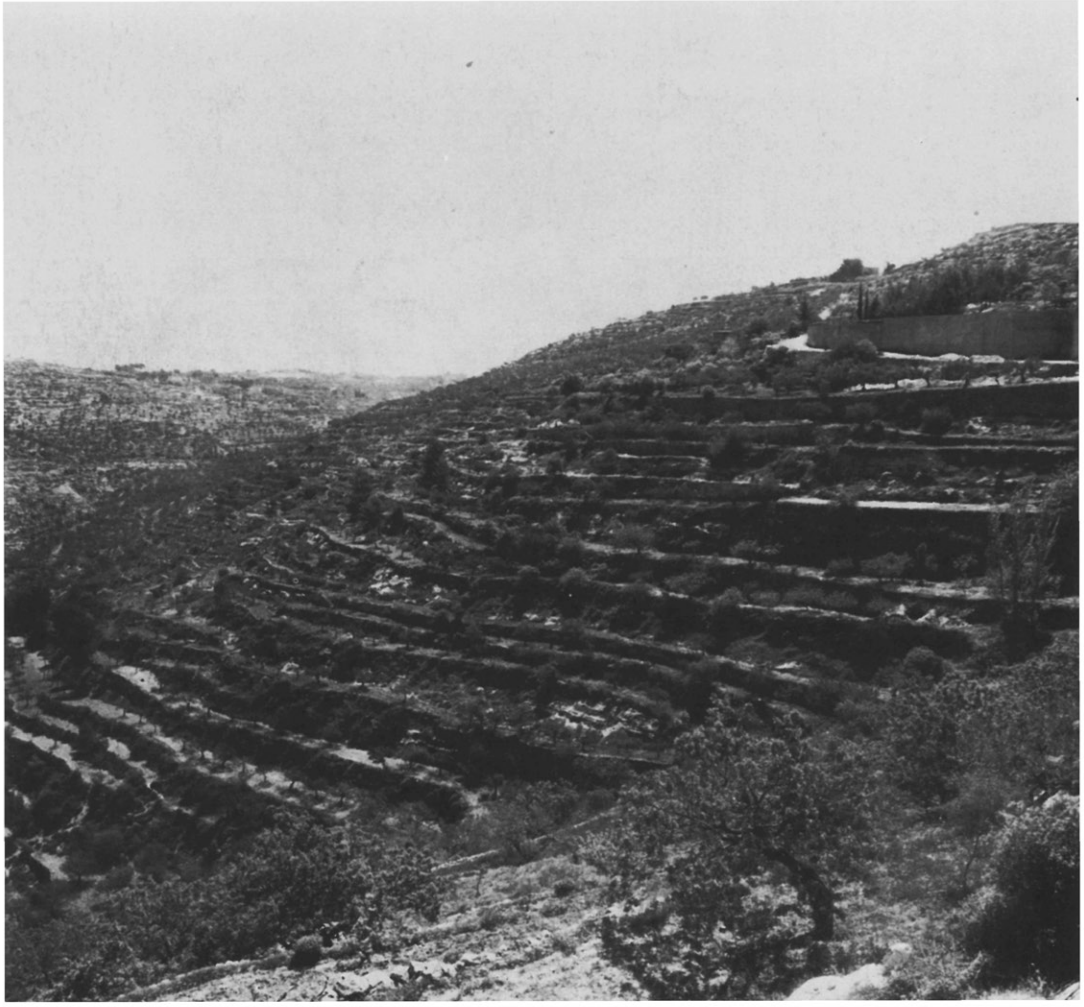
Several of the proposals attempted to overcome the devisive impact of Route 1 by reinforcing the east–west routes linking the Israeli and Arab communities and by proposing specific centers to serve both communities along the intersections of these principal routes. In another proposal, developed by a third studio under the direction of Christopher Chadbourne, the team of Isabel Renteria, Barbara Kessner, and Susan Ziegler proposed a community center at the crossroads between Route 1 and the east–west roads of Hizma and Amata, strategically located at the junction of Jewish and Arab settlements.

**6.11** *The Mancinelli, O'Brien, and Woodfin scheme calls for two major north–south roads. One to the far west creates Jewish development opportunities, and the second to the east runs past the airport and new industrial area deep into the desert and then through Mount Scopus to the Old City. It allocates major Arab development at the north end of Ramallah Road. By spreading the road network and concentrating Arab and Jewish developments, the scheme attempts to minimize urban impact on agriculturally productive areas and traditional landscape zones.*

**6.11**


West Road
East Road
Ramallah Road
Major Roads
Minor Roads
Industry
Low / Medium Density Housing
High Density Housing
Institution
Forestation / Park
Orchard
Field / Agriculture

6.12



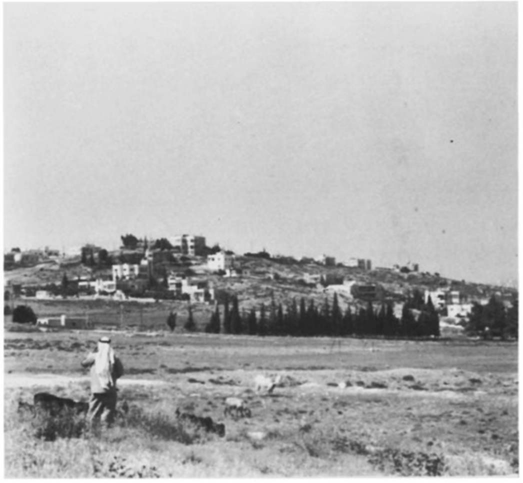
*6.12 Traditional landscapes on the west-facing slope of the northern region.*

*6.13 Scattered Arab development along Ramallah Road. The pattern of development is almost entirely dictated by existing land parcelization and local access roads to plots away from the main road.*

*6.14 Model of development of two neighborhoods. To connect them, the saddle between the two hills is occupied by commercial and institutional establishments (Renteria).*

*6.15 Model of housing development along one of the ridges east of Ramallah Road. The intensive wall-like development creates a sharp borderline between the hostile desert open space and residential areas behind it (Chadbourne studio).*

6.13



6.14

6.15

### *Development and Housing Patterns*

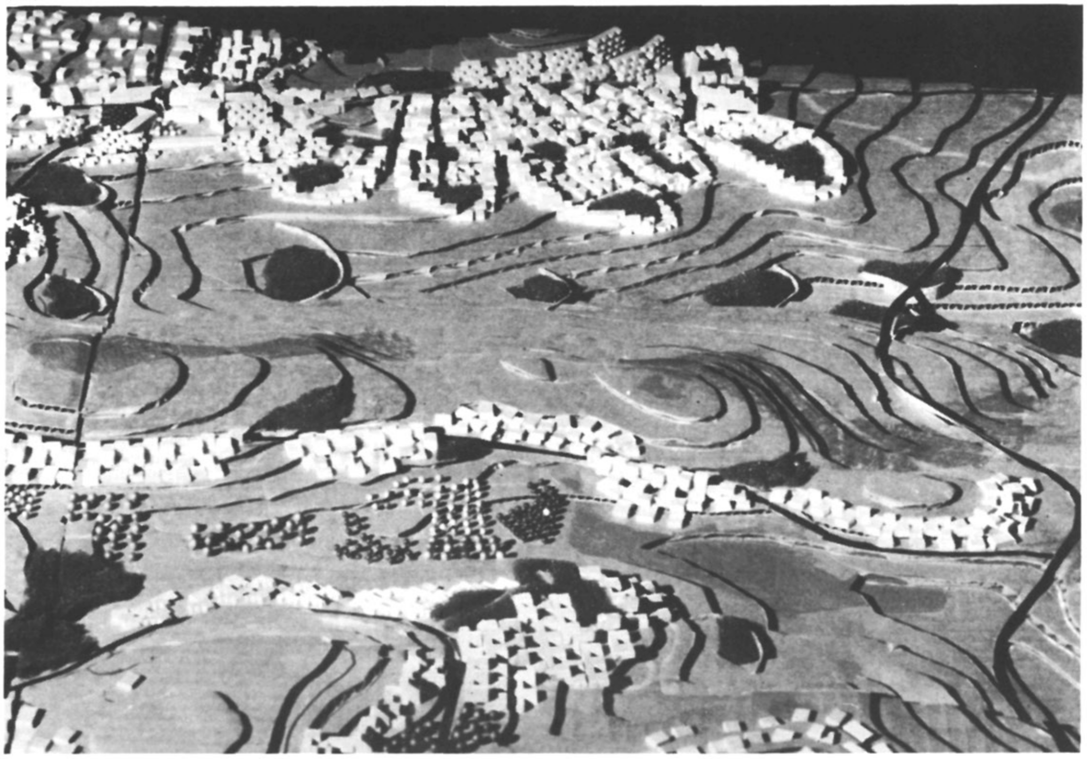
Several schemes developed designs for housing. These attempted to deal with the desert and agricultural edges and the Jewish and Arab settlements. Taking on the problem of the edge of the city at the desert, Karen Phillips and Susan Ziegler proposed a design by which apartment blocks would form a linear wall-like edge. Lush gardens would be located directly behind these wall-like structures, which would be the focal point for two- and three-story housing clusters within the walled compounds. Attempting to deal with the Jewish families' preference for ground-based housing while trying to reach densities comparable to the prevailing patterns of the Ministry of Housing, Paul Zemtzov and Al proposed clusters of attached courtyard houses, which nevertheless achieved the density of seventy units per hectare. Attached terraced housing on the western and southern slopes of Givat Eras achieving densities of ten to twelve units per dunum was proposed by the teams of Uri Shetrit and Robert Elliot.

Missing from the proposals for housing types was a strategy for achieving particular patterns by intervening with the development process rather than by direct design. While the proposals demonstrated that densities similar to the Ministry of Housing estimates could be achieved with low-rise ground-bearing units or that a modest reduction in density might greatly increase living amenities while reducing infrastructure and development costs, the studies did not adequately explore the development mechanisms that could bring these qualities forward. For example, students observed that the projects constructed by the Ministry of Housing and its large affiliate construction companies often imposed a repetitive and standardized design on a large area, which evoked a sense of "project" rather than city and lacked the diversity of the older neighborhoods of Rehavia or Talbiyeh. While some proposals attempted to deal with this deficiency by showing that diverse designs are feasible, it could be argued that the most effective method for dealing with this issue would be limits on the size of parcels developed by single developers or architects. This would also require that direct access from a public right-of-way be afforded to each parcel.

Similarly, the dramatic difference between housing patterns of the Arab sector and the Ministry of Housing in northern Jerusalem could have led to a proposal that introduced in the Arab sector minimal ordering patterns such as public rights-of-way (even without reparcelization) and, on the Israeli side, suggested a much larger proportion of parcels be available for individual construction by families. Such a proposal would have been extremely effective at several levels. It would have modestly reduced densities, but as long as parcels remained small, comparable to those in Arab villages, the density would be acceptable within the regional strategy (four even five units to the dunam). It would have broken the monopoly of the Ministry of Housing, allowing many small contractors and even owner-builders to replace the large conglomerates. It would have immediately introduced a high level of diversity, and would have, in fact, required some ordering mechanisms to cope with such diversity. It would have resulted in a pattern much more adaptable to the hilly topography and begun to eradicate the artifical contrast between Jewish and Arab development.

Many observers in Jerusalem have erred in assuming that the contrasting housing patterns are the expression of contrasting life-styles and values. Differences, however, are to a great extent the result of bureaucratic and corporate structures imposing themselves on the process and the product. In another city such differences might be associated with the difference of class (as in the case of the blocks of luxury housing contrasting with the *favellas* in Rio de Janeiro or Caracas). But in Jerusalem things take on unexpected symbolic meanings, and the contrasting patterns of the clustered village and the Ministry of Housing super-block become

6.16



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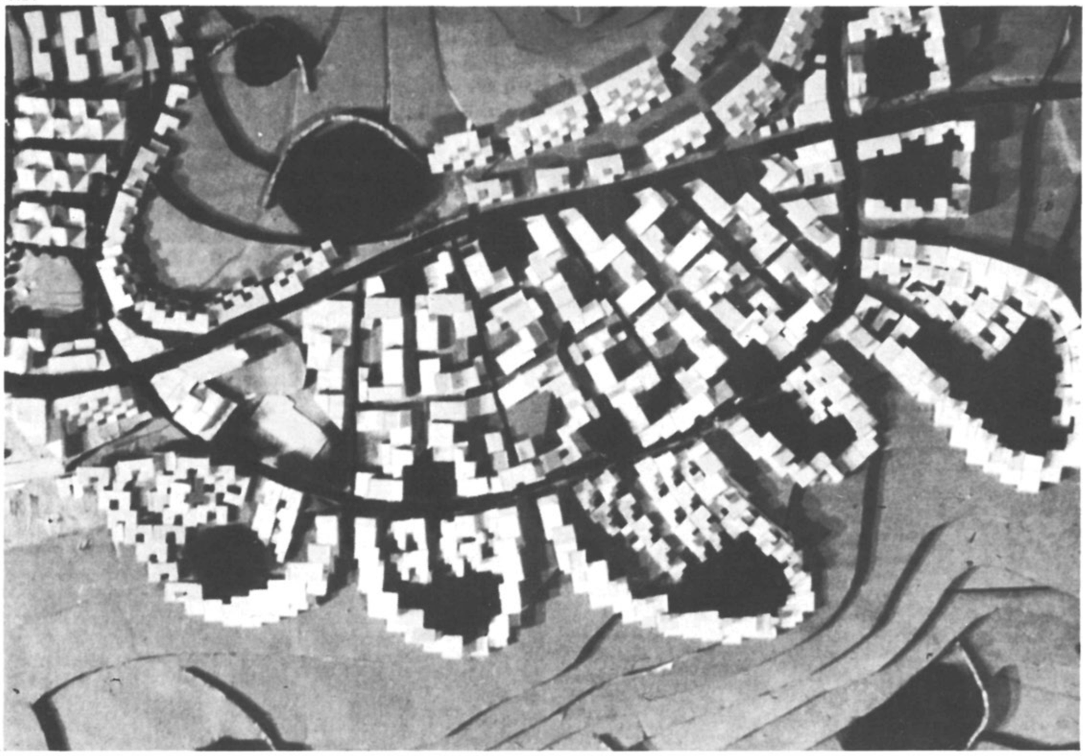


**6.16** *Housing development east of Ramallah Road follows the east–west direction of the ridges. The higher density is concentrated on the south-facing slopes to maximize sun exposure (Karasov, Runco, Shetrit).*

**6.17** *Walled clusters of housing with small gardens attached typify areas with moderate slopes (Karasov, Runco, Shetrit).*

signposts of territoriality and separation. The long-term objective of housing policy in Jerusalem must be to erase the artificial difference while addressing questions of culture and tradition, of amenities and respect for the land.

The housing designs developed by the students for the new neighborhoods proposed a number of alternatives. There were specific ideas about increasing density within ground-based units, forming distinct edges between urbanized and non-urbanized land, and responding to the particular topographic conditions of the region. By and large, however, the students conceived and presented the designs as an architect would when commissioned to design and construct a precinct. When a student considered the possibility that attached courtyard houses on small lots could result in densities similar to the four-story walkups, he or she proceeded to develop a detailed design in which facades, fenestration, and interior floor plans were treated with the same concern as clustering, siting, parking, and roadways. The faculty challenged the students by stating that experience demonstrated that the expression of architectural ideas at an urban design scale invariably leads to their abandonment once the authors of such propositions are replaced by other architects and/or developers who actually construct the project.

It was therefore necessary to sift out generic elements that profoundly affect the qualities of the proposed development from those that are secondary in importance. Massing, the relationship to the topography, the systemic character of the network of roads, parking, and access alleys are significant, whereas roof shapes and details of terracing are less important. Similarly, the proportion of open courtyards to built-up areas, the pallet of exterior materials, and the areas for windows and entrances are significant, while detailed floor plans, facade designs, and formal manipulations are secondary. One measure of what should be considered of primary importance is that generic issues lend themselves to expression in verbal, legal terms, such as ordinances, and legislative mechanisms such as zoning, unit plan development, and regulatory controls.

There was clearly a difference between a specific architectural proposal and its distillation into urban design principles that any architect could understand, respect, and accept as a guideline in producing his plans. For example, the idea of high-density, low-rise construction adapted to steep topography might become a building envelope two or three stories in height, which follows the natural topography. Additional requirements for the attachment and spacing of units, provisions for outdoor space (public and private), circulation systems, and parking would in principle describe a generic type, as distinct from a specific design. The attempts to distill the generic from the particular met with considerable difficulty in the studio. For the students to appreciate the problem, it was first necessary to put forward a fully developed concept, test it in a specific architectural design, and then withdraw and generalize it into urban design "structures."

The task became even more difficult when more subjective proposals were put forward. One group proposed that the transition from urbanized areas to the desert landscape be well defined, even *abrupt*. The specific design indicated how apartment buildings could form a "wall" against the desert. Was that a generic idea, and could it be translated into a legislative requirement? If an attempt was made to require it by decree, would it not generate opposition from legislators and architects for being too specific and subjective and hence an inappropriate imposition? After all, it was easy to conceive of alternative ideas: might not the relationship be one of gradual transition between the open landscape and built-up areas? Such is the case in the villages in the region, where out of the more compact cluster of the central village, individual units — families — construct dispersed houses.

**6.18** *Model of housing development in Givat Eras. High-density housing is permitted where slopes allow for clear views of the open landscape. The flat areas with limited view of the far landscape are moderately developed with greater allowance for open space (Elliott, Rex, and Wedlan).*

**6.19** *Model of Givat Eras from the west. A belt of intensive housing development is defined by forestation and arboretum. Ring roads are provided to connect the neighborhood along parallel topographical contour lines (Karasov, Runco, Shetrit).*

**6.18**

**6.19**

Recognizing the conflict between concepts that are clearly generic and those that are more subjective, the Ministry of Housing devised a procedure by which an architect-urban designer would be retained as "site architect" to develop overall designs for a sector. Once that is done, several architects then work under the guidance of the site architect to develop plans for individual parcels. Thus the procedure of following a fixed plan and ordinances — a static expression of the urban-designer concept — is replaced by the less rigidly defined dynamic process of human negotiations.

A critique of these procedures as they were practiced in Gilo revealed that leaving matters to the process of dialogue encouraged the site architect to retreat to familiar architectural ideas in a manner similar to that of the studios, to focus on the preparation of a specific architectural design, rather than attempt to distill the essence of such schemes into more fundamental qualities. This encouraged the architects developing the individual parts to focus primarily on questions of architectural expression, which resulted in schemes that were introverted and could not be connected to the adjacent ones. Rather than producing a *city* — a connected network where the parts form a whole — they designed distinct villages or enclaves, which were separated rather than connected by the arterial roads. Instead of evoking a city of interwoven parts, they produced a catalogue of architectural ideas.

Separating items of specific architectural expression from the generic urban qualities has been much discussed in urban design theory as a necessary mechanism for achieving unity and continuity in the city, which by definition is designed in both large and small parcels by separate entities. In an attempt to infuse the traditional zoning plans with qualitative prescriptions, the notion of an *urban design guideline* has been introduced to compensate for the breakdown of voluntary traditions in the vernacular of city building. Such customs and traditions constituted a syntax, evolved over time, that represented precisely the distillation of generic urban design ideas into an accepted vernacular. Row houses built along streets or piazzas accepted as a given the generic urban form. By further accepting the syntax of architectural construction, masonry bearing walls, bay windows, and gable and mansard roofs, builders achieved a measure of unity while at the same time permitting diversity of detail, as in Boston's Back Bay or London's Georgian squares or the grand designs of Nash.

### *Open Space*

The students recognized that the preservation and development of an effective open-space network would provide amenities for the population as the northern region urbanized. They proposed several types of open spaces. Parks in the heart of the proposed communities, which would incorporate institutions and recreational facilities, were located, in most proposals, on the hilltops and plateaus. In contrast, the open spaces at the edge of the development were located primarily in the valleys. A third type of open space was forestation of the valleys and the slopes. This was considered an effective way of improving the image of the entire area and of forming an edge separating the agricultural terraces from urbanization. For example, a proposal for forestation of the westward slopes along Route 4 would hide the new development from the highway, giving it a parkway character until it reached the city proper. Furthermore, the forestation could effectively separate developments from each other, minimizing the visual impact of sprawl and giving a sense of definition and identity to various sections of the region.

**6.20**

The students examined the alignment of access roads and entry points to the city. The team of Azra Hameed, Jules Loweff, and Cynthia Rice studied a reinstitution of the historical entry into the city of Jerusalem. They wanted to link improved existing roads and one new short section so that entry into Jerusalem would go through the terraced landscape and over the hill of Nebi Samuel, from which major views of the city could be achieved. The entry would then go through Ramot, down and then up into the city. This plan had the advantage of more closely linking Ramot with the other parts of Jerusalem.

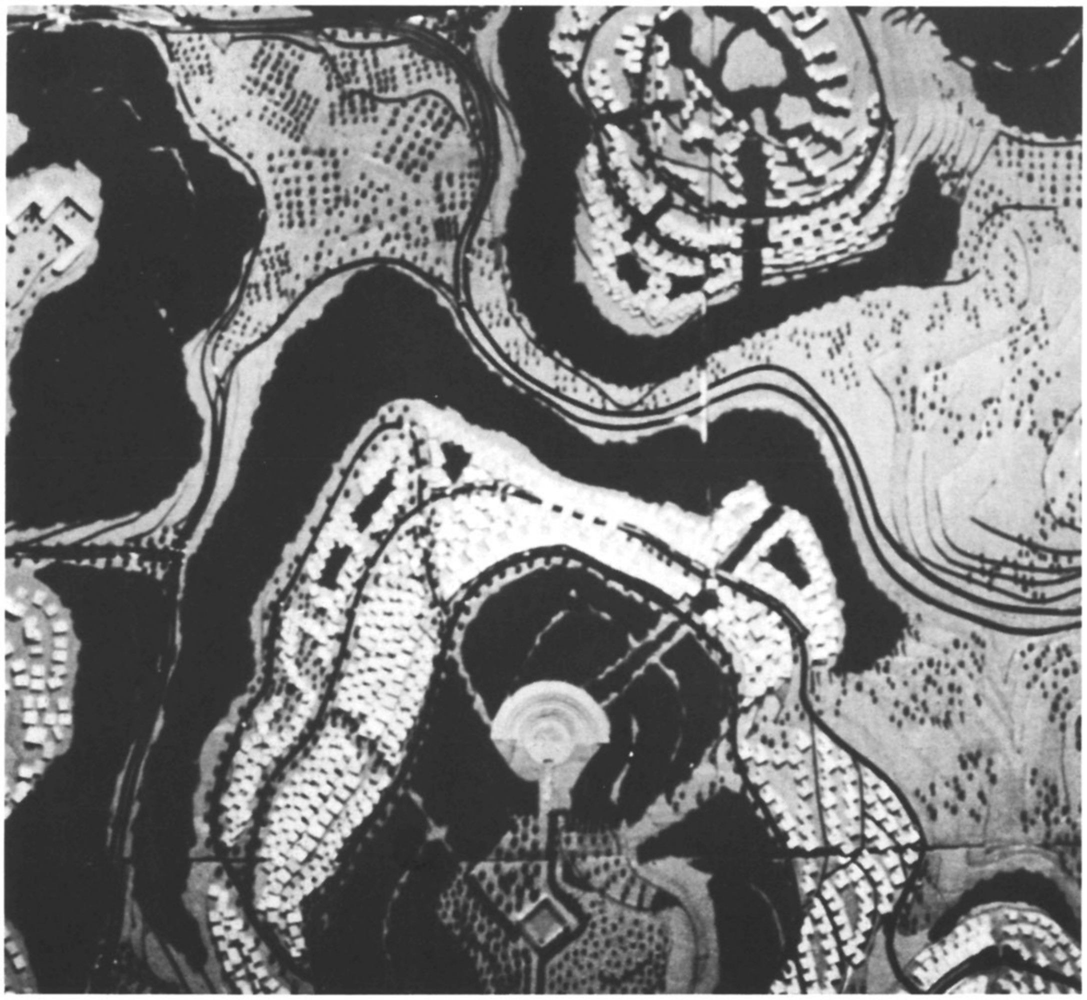
The entry corridor designed by the team of Robert Elliot, Geoffry Rex, and Susan Wedlan was a variant of the Route 4 corridor proposed by the municipality of Jerusalem. It went through the valleys, terraces, and a rocky landscape and then entered the more urban area through the valley between Ramot and Ramallah Road. The impact of Ramot would be softened by the forest pattern. Givat Eras was maintained as an unforested zone and the forest ahead marked the urban edge adjacent to the Sorek Valley. Between Givat Eras and Ramot, the impact of the edge of the city would be sharpened because of its location on the ridge surrounded by forest. On the approach to Sorek Valley, which clearly marks the entry to the city, the climb into the city would begin.

**6.20** *Traditional orchards and agricultural fields in the northern region.*

The team of Isabel Mancinelli, Bartholomew O'Brien, and Thomas Woodfin proposed two major north–south roads. One was far west of the study area and created a northern development opportunity they assumed to be primarily Jewish. They proposed a second road past the airport and a new industrial area and then through the desert to the east of Ramallah Road, entering from the direction of the Old City. Major Arab urban development would be located to the north along Ramallah Road. The design had the advantages of a direct access to major destinations from the north and the probable minimization of development impacts on the agriculturally productive areas and the landscape character around Nebi Samuel.

The proposal by Deborah Karasov, Joseph Runco, and Uri Shetrit for the new Route 4 followed the scheme of the municipality of Jerusalem. It ran along the western edge of the Ramallah Road development and passed through the Sorek Valley into the city. As travelers approached Jerusalem, they would get a distant view of the development along Givat Eras and the arboretum at the top, which marks this as one of the entries to the city. The route would go through a developed agricultural and terraced landscape, with the intense developments of Givat Eras and Ramot and their forest edges indicating the place of entry. A transition entry was created through the narrow valley between Ramot and Givat Eras, which was made more narrow by the new forest. The design for the major interchange needed in the Sorek Valley was accomplished in a manner that maintained the valley as an agricultural and recreational land.

**6.21**



**6.21** *Open space, forestation, and orchards were employed by Karasov, Runco, and Shetrit to mitigate the impact of the road system on the landscape.*

**6.22** *Forestation is used to outline the edges of the built environment. Elliott, Rex, and Wedlan use this theme in their development of the Zofim Valley.*

**6.23** *Nebbi Samuel, which various traditions claim as the burial place of Samuel the Prophet, marks the highest elevation in the northern region.*

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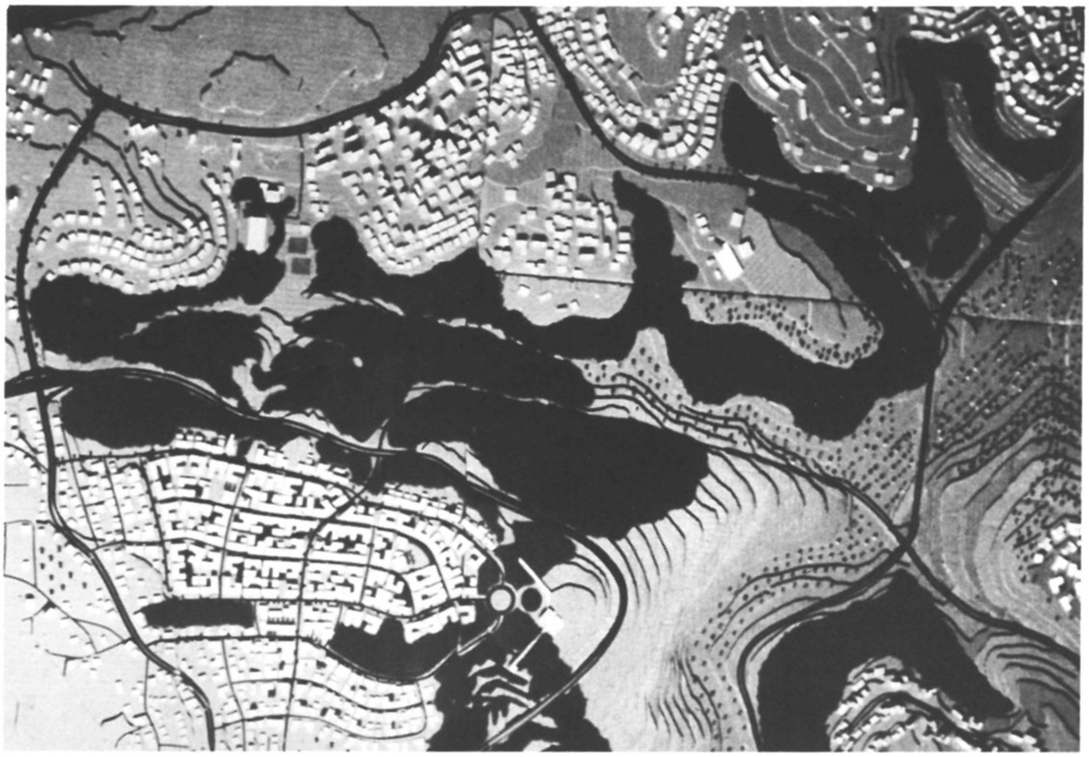
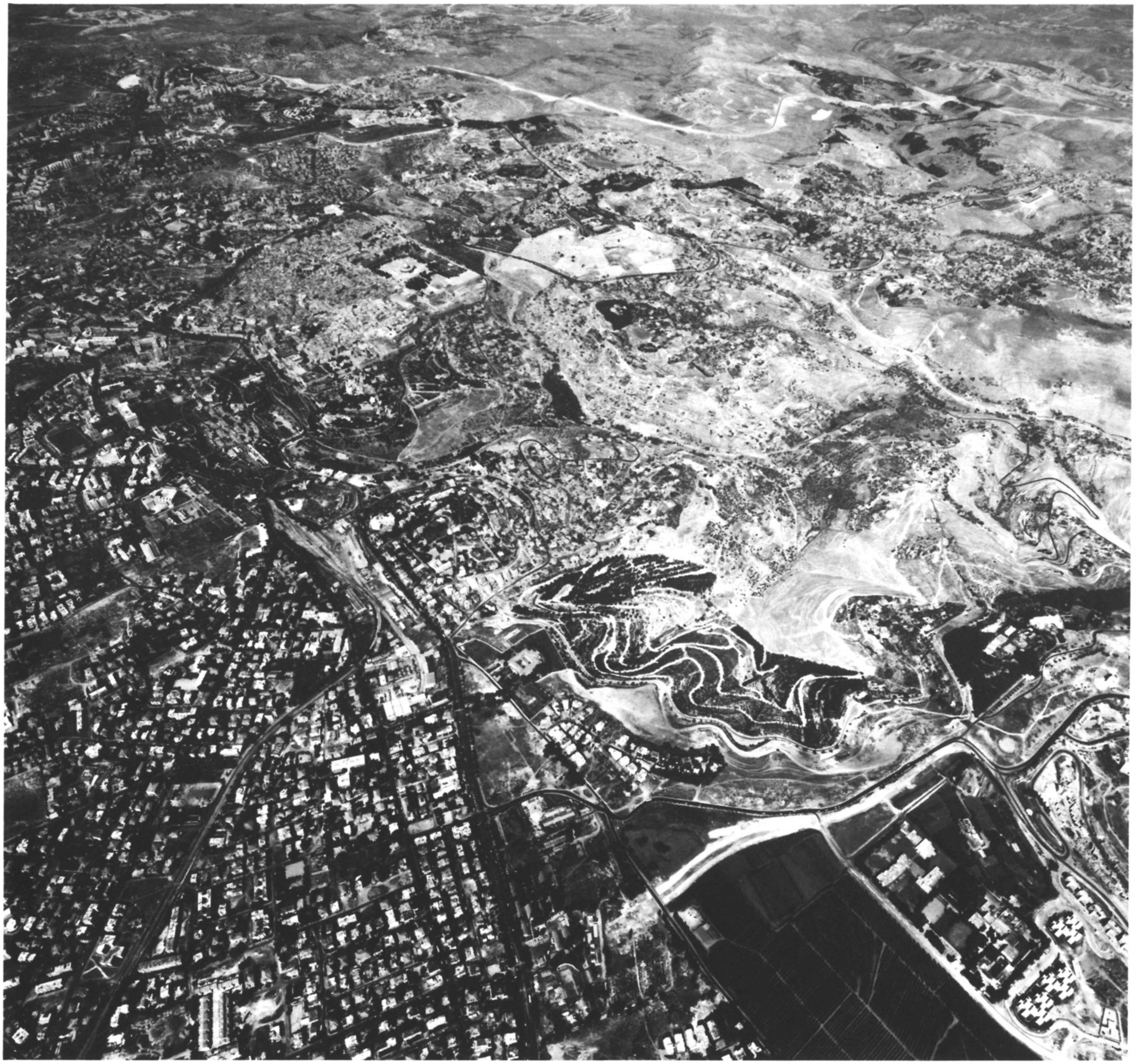


6.23

**7.1**



# 7 THE SOUTHERN REGION

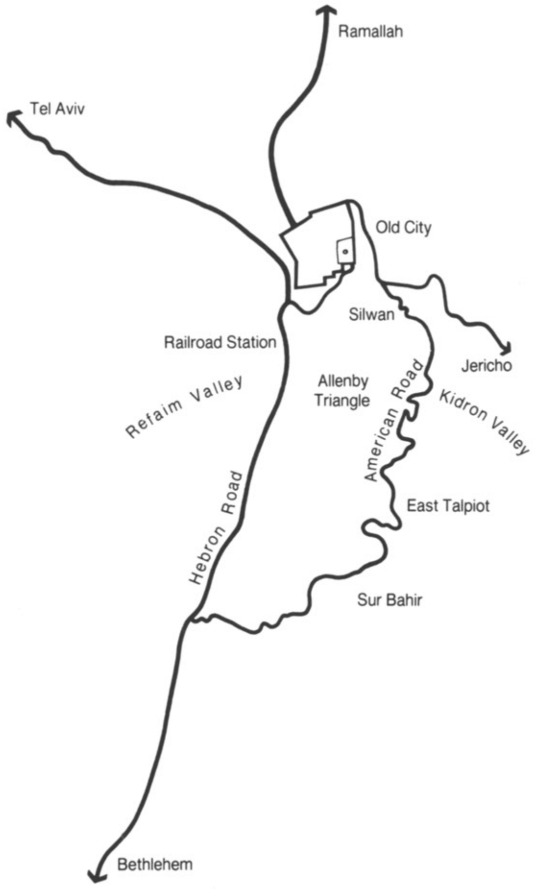
Using the procedures developed by Steinitz for the northern region, a second group of students proceeded under his direction to study the southern region of Jerusalem. In contrast to the northern region, here spontaneous urbanization pressures were affecting the region to a greater extent than official plans. The neighborhood of Gilo had been constructed four kilometers from the center of Bethlehem, and the master plan proposed that Route 4 would traverse the valley west of Gilo and continue south to Bethlehem, Bet Jalla, and Hebron. The real danger in this area, however, did not arise from official plans, but from unplanned sprawl, expanding Arab villages, and pressures on the area by private developers. At stake was the relationship of Bethlehem to Jerusalem. Through the millennia, they were two distinct communities forever fixed in myth, by the story of the birth of Christ and his journey from Bethlehem to Jerusalem. Now Bethlehem was in danger of being swallowed up. The question of its identity was a cause for concern, so development policies had to come to terms with the growth and expansion of the southern Jerusalem population, both Arabs and Jews, and the growth and expansion of Bethlehem.

**7.1** *Aerial view of the southern region looking north. The Old City is in the upper left; Silwan and the Kidron Valley are in the center; the Allenby triangle is on the left.*

**7.2** *Key map of the southern region with the main roads.*

**7.3** *Population growth projection in the southern region for the year 2000 as compared with 1980 (source: Jerusalem Planning Policy department).*

**7.2**



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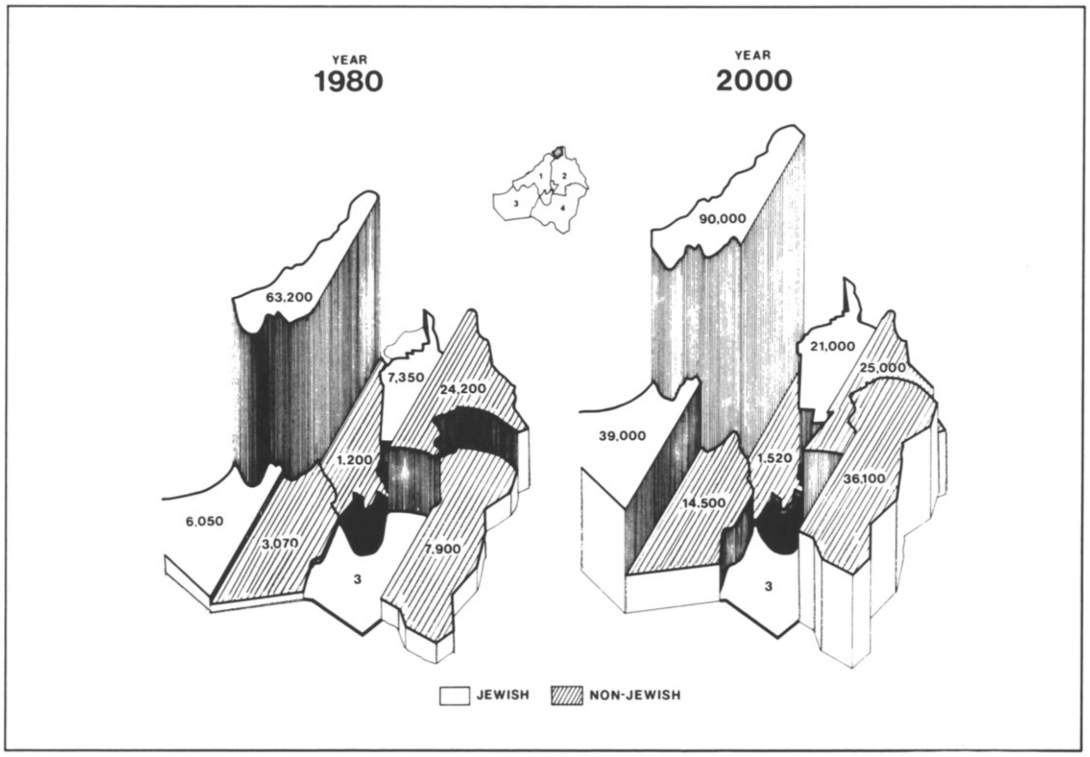
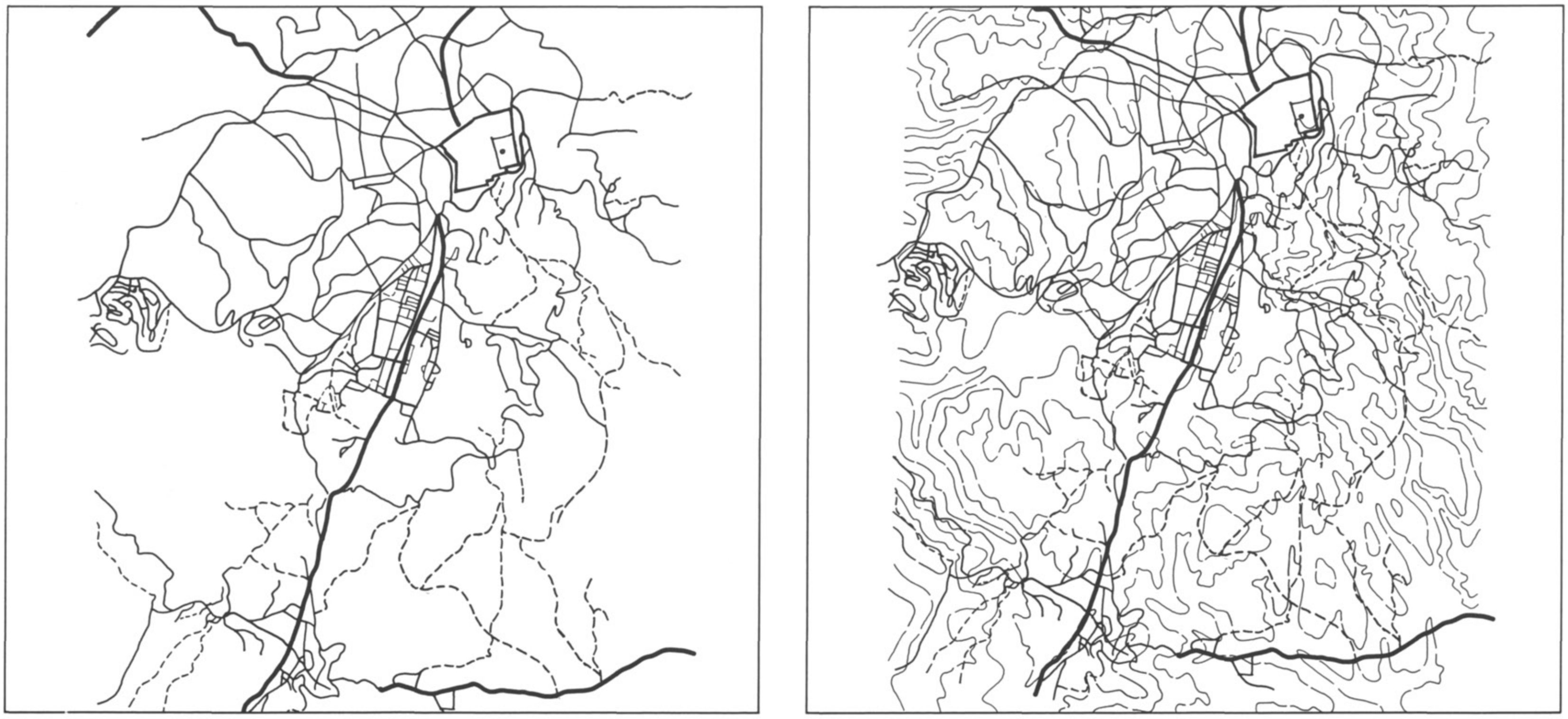


## METHODOLOGY

Once again, a model of the region was constructed. Relevant information was mapped on transparencies. Existing development was constructed on the model. A number of studies specific to the southern region were added to this procedure. Recognizing, for example, the desire for the processional route from Bethlehem to Jerusalem to traverse pastoral, biblical, open landscape, the students used the model to study and map where development could take place without being visible from the historic route. This enabled them to classify sites as within or outside the view basin of the historic routes. While all of the proposals covered the entire area, each one focused on a particular theme or area, such as the separation of Bethlehem and Jerusalem, the Refaim Valley, the southern entrance to Jerusalem, the Allenby Triangle, the railroad station and the rail corridor, and new urbanization in the southern sector.

**7.4** *Documentation of existing physical condition in southern region: a. regional road network; b. regional road network superimposed on topographic map; c. forestation; d. agricultural fields; e. orchards (primarily olive); and f. all physical components superimposed. It is obvious that agriculture and forestation cover extensive areas of the southern region, giving it its picturesque image.*



**7.4a**

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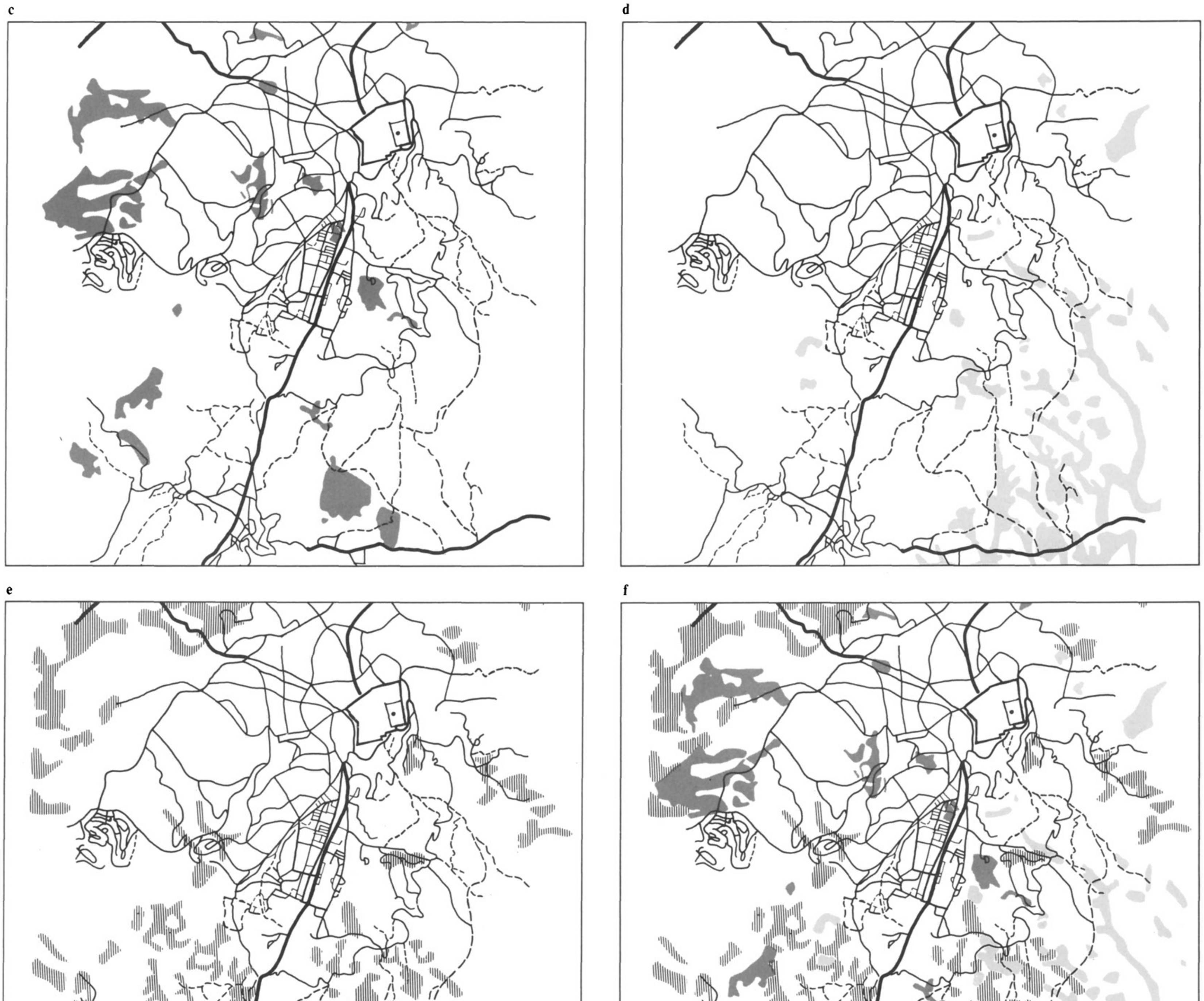
c
d
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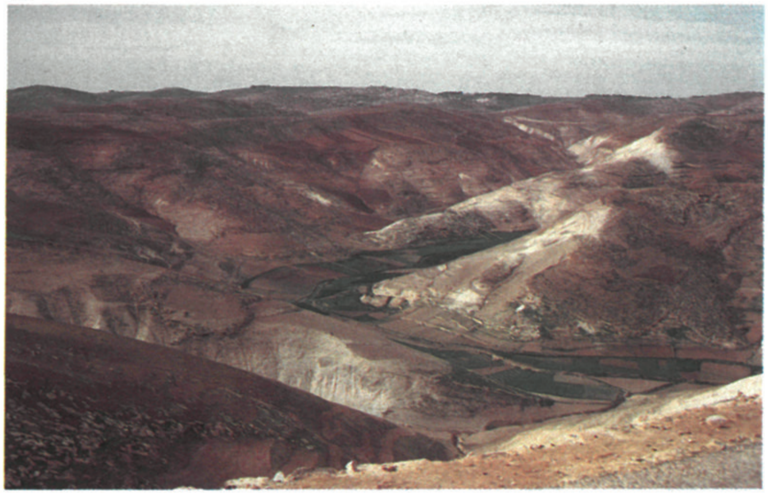
7.5

**7.5** *The monastery of Mar Elias, like the Mosque of Nebbi Samuel in the northern region, is an integral part of the image of the southern region.*

**7.6** *Typical view from the east toward the city. Deep wadis cut in the mountains and flow east. This makes north–south transportation arteries almost impossible.*

**7.7** *Agricultural landscape. Fields are concentrated at the bottom of the valley; south-facing slopes are reserved for orchards, typically vines or olive trees.*

**7.6**



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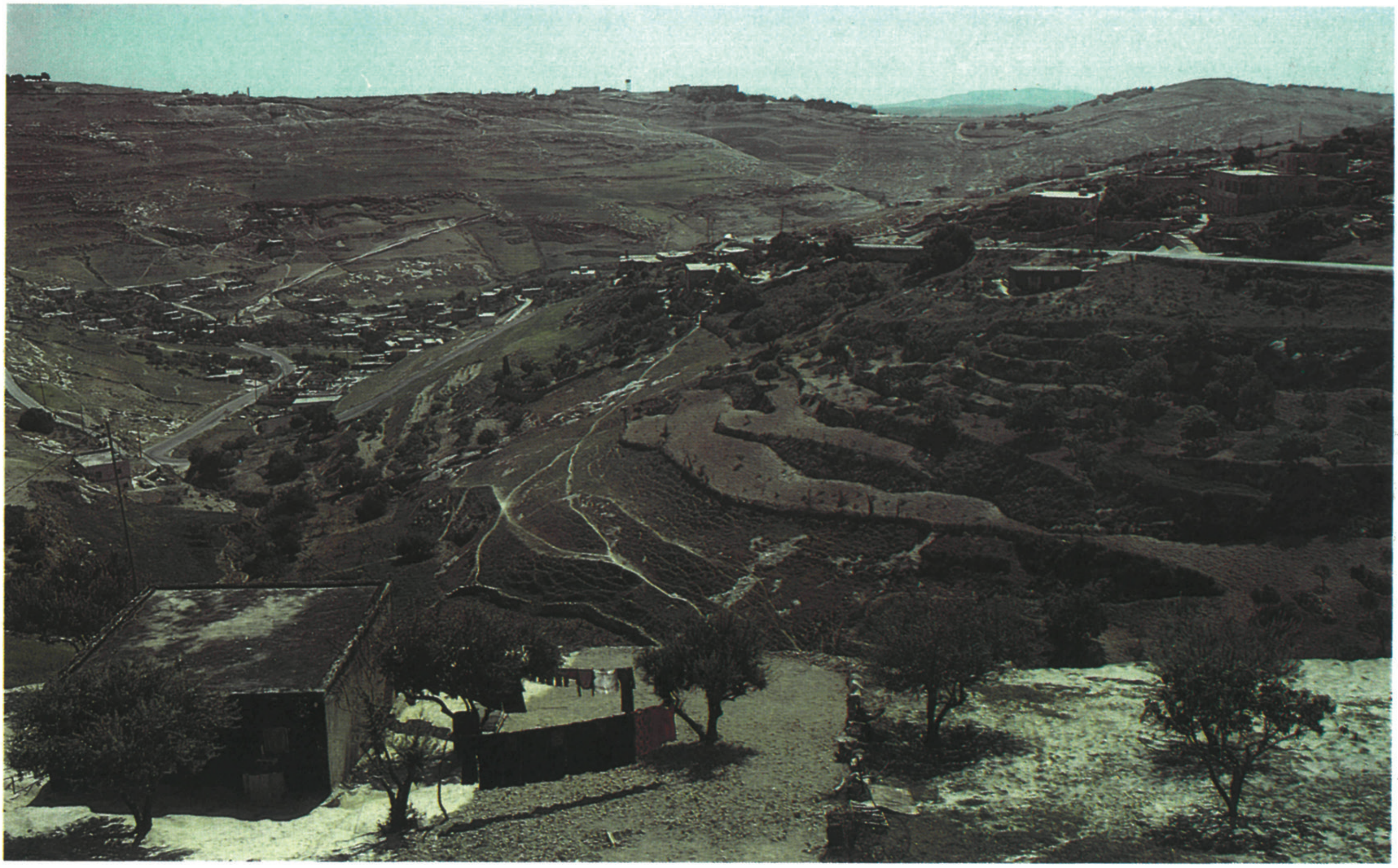


## THE IDENTITY OF BETHLEHEM

All proposals attempted to preserve the separation between the two cities. These included major landscape improvements and restriction on construction in the visual basin of the processional route. Recognizing that such a policy could not be accommodated without providing for growth and expansion elsewhere in the area, the students focused on proposals that provided alternative locations for development.

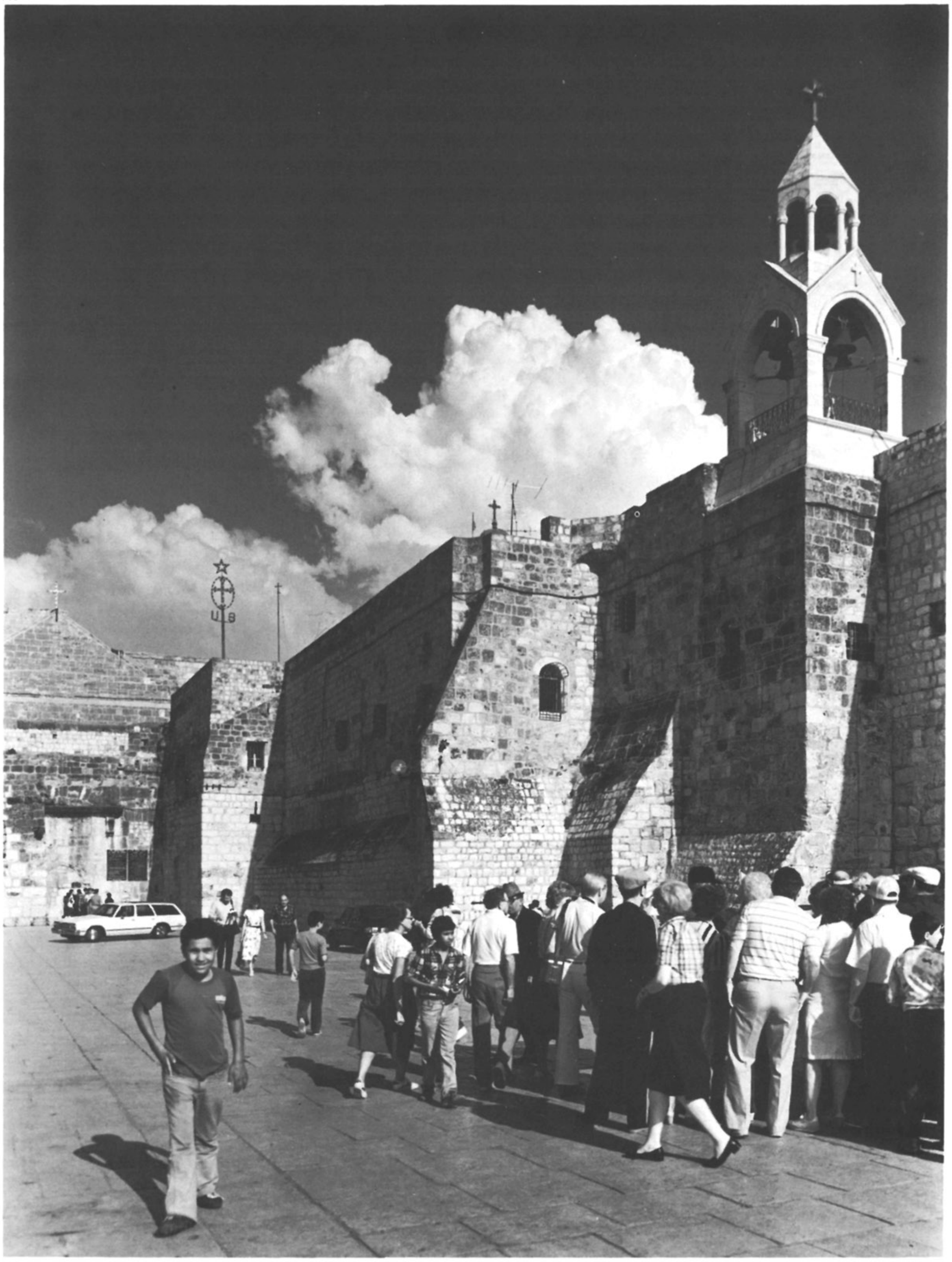
Dennis Couture suggested that the population of Bethlehem could be doubled without sacrificing the strict edge to the open-space zone that now visually separates Bethlehem from Jerusalem. This could be accomplished by concentrating new urbanization on the southern slopes of the town — the slopes facing away from Jerusalem. Incorporating a southern circumference road linking the Route 4 access on the west to the eastern road access would make a new zone for potential urbanization considerably more accessible. Furthermore, this new road would ease the congestion of bus and tourist traffic on the main ridgetop spine of the city. New parking areas, shopping, and tourist facilities near the main highways, along with bus and pedestrian links to the Manger Square area, were proposed. Limiting vehicular traffic to the historic and fragile urban core would also enhance the economic health of Bethlehem, both as a tourist attraction and as a regional settlement.

The students proposed that the northern face of Bethlehem be part of a regional open space designed to separate identifiable Bethlehem and Jerusalem urban areas, to maintain a pastoral landscape for religious institutions, and to preserve Bethlehem's highly fragile "spirit of place." This open-space separation achieved its maximum expression in the proposal by Steve Johnson for an open-space wedge linking Bethlehem to the Old City. It incorporated the areas seen from Bethlehem and from the monastery of Mar Elias and included Ramat Rachel, the proposed Kidron Valley national park, new open spaces in the Allenby and railroad areas, and the park system around the walls of the Old City. The proposal envisaged settings for new religious institutions, recreational sites, and a new road linking several existing rights-of-way and providing access along the eastern edge of the open-space system. Increased access and public use would add pressure for better maintenance of this visually important area. The conservation of the area between Bethlehem and Ramat Rachel was given top priority; all the students' design schemes took care to site residential, industrial, and commercial development out of its views.

A proposal by Nancy Dillard made this open-space wedge more easily accessible by foot and bicycle. It identified the many religiously significant places and routes — Jewish, Christian, and Muslim — and linked them in a complex network of pedestrian paths. This network would allow a pilgrim, tourist, or schoolchild to experience the southern region on predominantly undeveloped paths along historical and traditional routes of pedestrian and animal-based travel. One of the proposed paths approximated the Hasmonean (c. 500 B.C.) aqueduct route from Bethlehem to the Old City. The path was designed so that travelers could experience the major landscape and vegetation types of the area.

**7.8** *Manger Square at the center of Bethlehem; a view close to the entrance to the Church of Nativity.*

7.8



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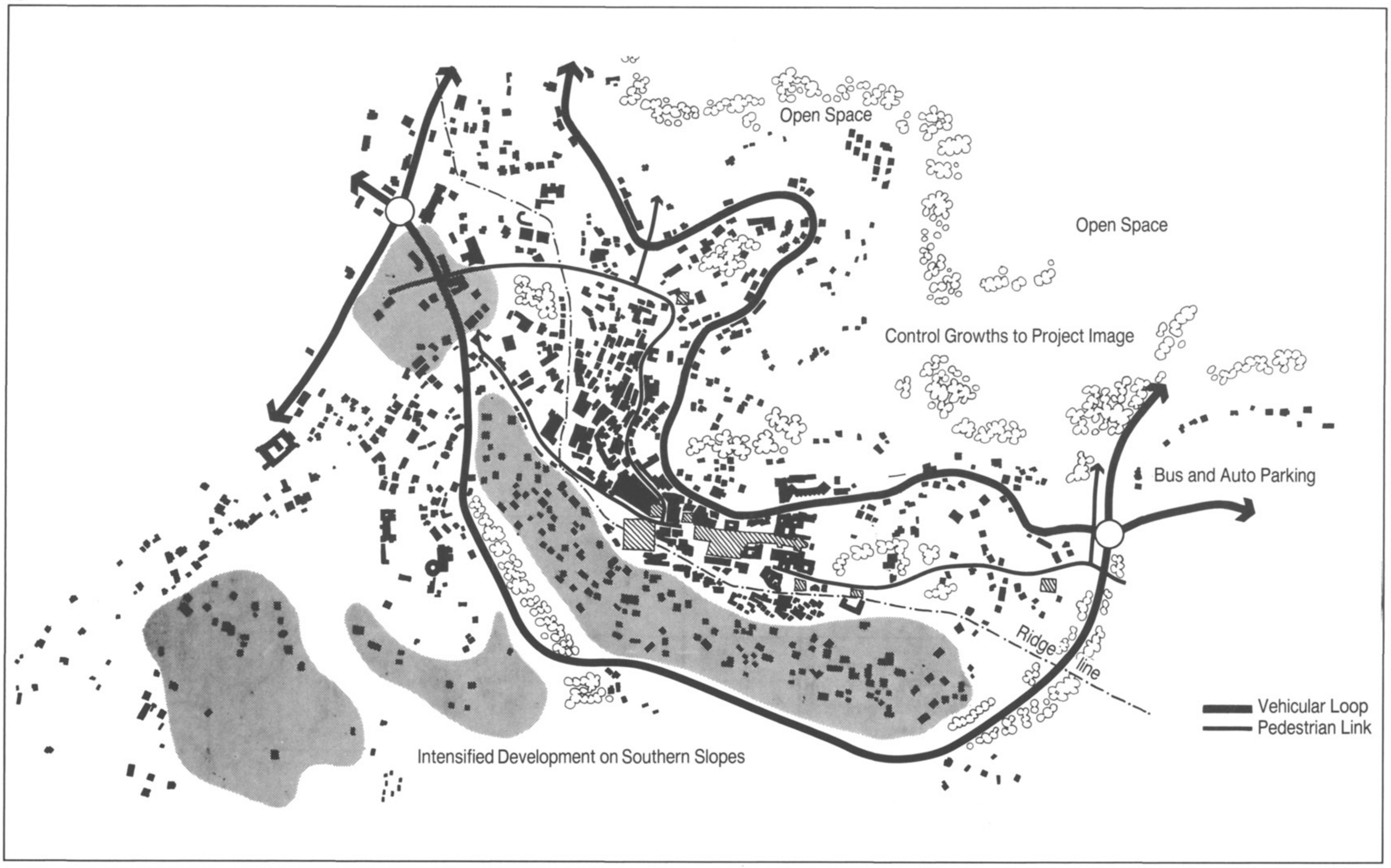

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**7.9** *Proposal by Couture encourages development of southern-facing slope in Bethlehem, away from Jerusalem, thus making a clear edge for each city with an open landscape zone between.*

**7.10** *Manger Square is currently used as the main bus, taxi, and car parking for thousands of pilgrims who come to the Church of the Nativity.*

## THE ROAD SYSTEM

Road alignments determine where development is likely to occur. The three principal routes the students considered were Route 4, the extension of the north–south highway bypassing Jerusalem and connecting to Bethlehem; the historic highway that presently connects the two cities; and the incomplete eastern route known as the "American Road," which was partially built by the Jordanians as an alternative connection between Jerusalem and Bethlehem and which runs through the arid eastern hills and valleys. All proposals accepted that Route 4 should be constructed as a regional expressway. While most teams agreed with the proposed alignment, an alternative routing west of the neighborhood of Gilo was proposed by Steve Johnson.

The existing Hebron–Bethlehem–Jerusalem highway was the subject of study because it was clear that it would continue to act as a principal connection between the two cities. A study of the views and conditions along the road led to specific proposals compelling in their simplicity.

Recognizing that the view of the new neighborhood of Gilo to the west of this road impinged upon the pastoral quality of the landscape, Nancy Dillard proposed a series of forestation programs and land embankments to conceal Gilo from the highway. At minimal investment, dramatic improvement of the experience of the processional route could be achieved.

The problem became more complex as the road entered urbanized Jerusalem after bypassing the monastery of Mar Elias. Here the road passed through several neighborhoods built in the 1950s. These are pockets of poverty in deteriorated buildings. The housing blocks are perpendicular to the street, resulting in a discontinuous street edge of considerable ugliness. Proposing an improvement for both the neighborhood and the access route, Patrick O'Connor called for filling in the space between the existing structures with new buildings. A more radical proposal by Cynthia Plank and Gary Fishbeck called for the realignment of the road as it entered Jerusalem. It should swing eastward, avoiding these neighborhoods, and come upon the view of the Old City from the hill of Evil Council (one of the more dramatic views of the walled city), and then continue along the ridge into the Old City.

The American Road, the eastern route to Jerusalem, was studied by the team of Larry Reed and Akihiro Shimoda, as part of an overall study for the Kidron Valley (see below).

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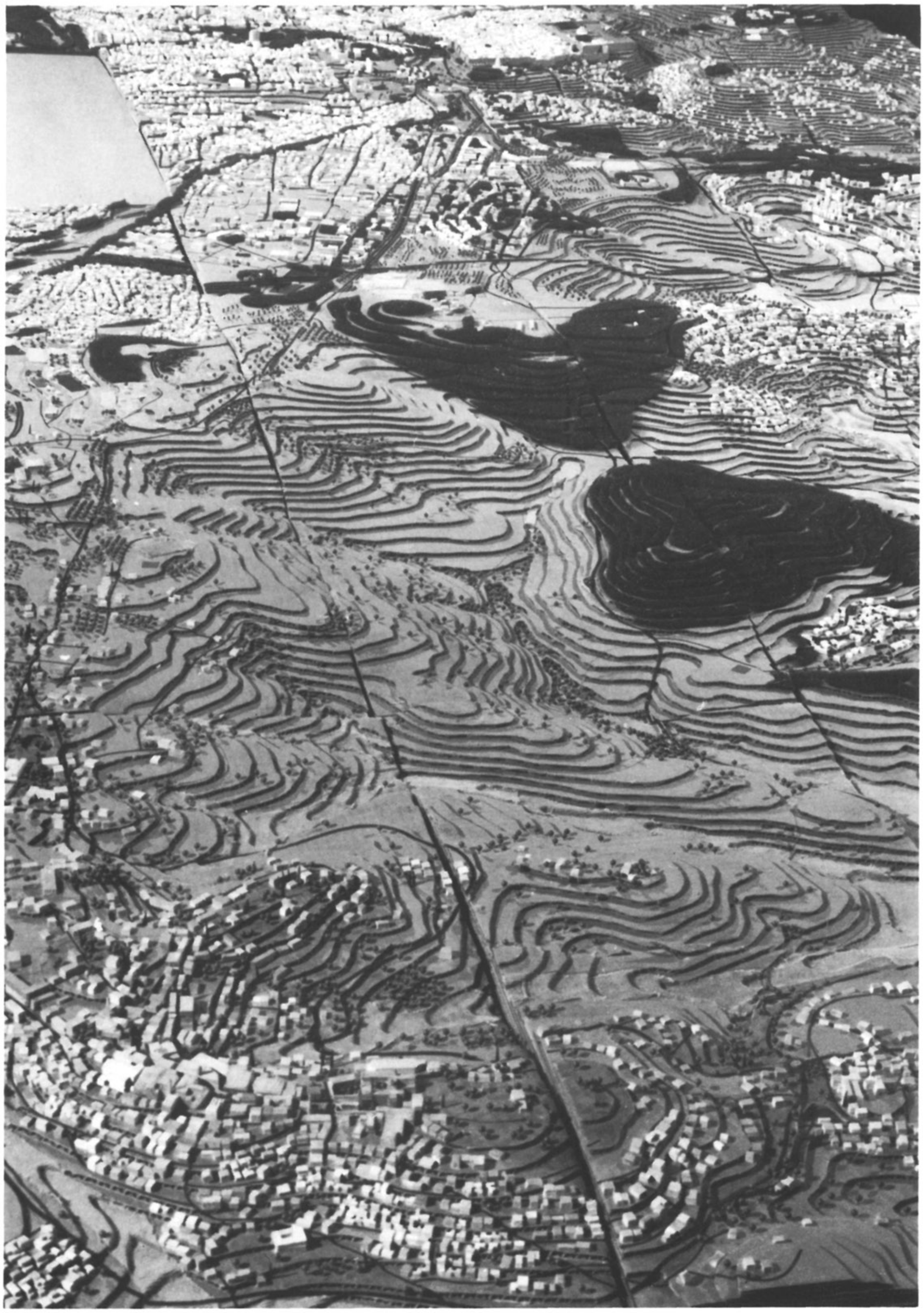

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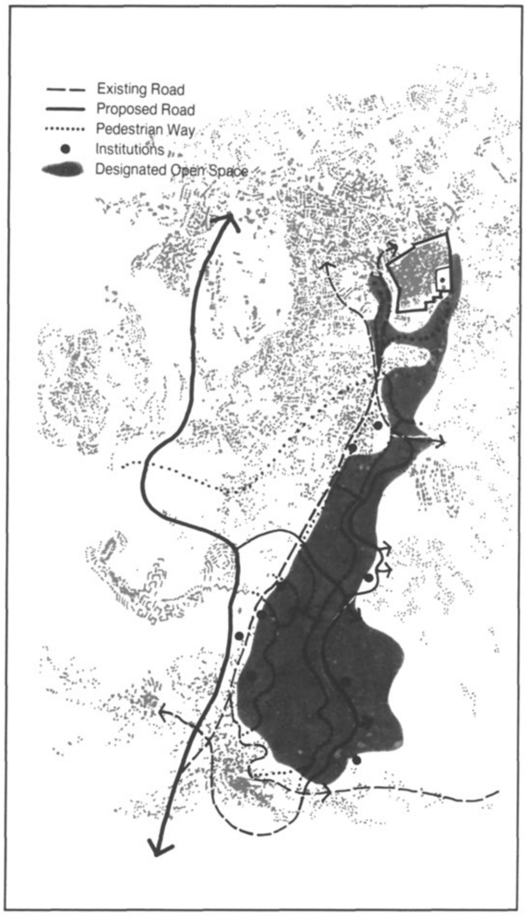
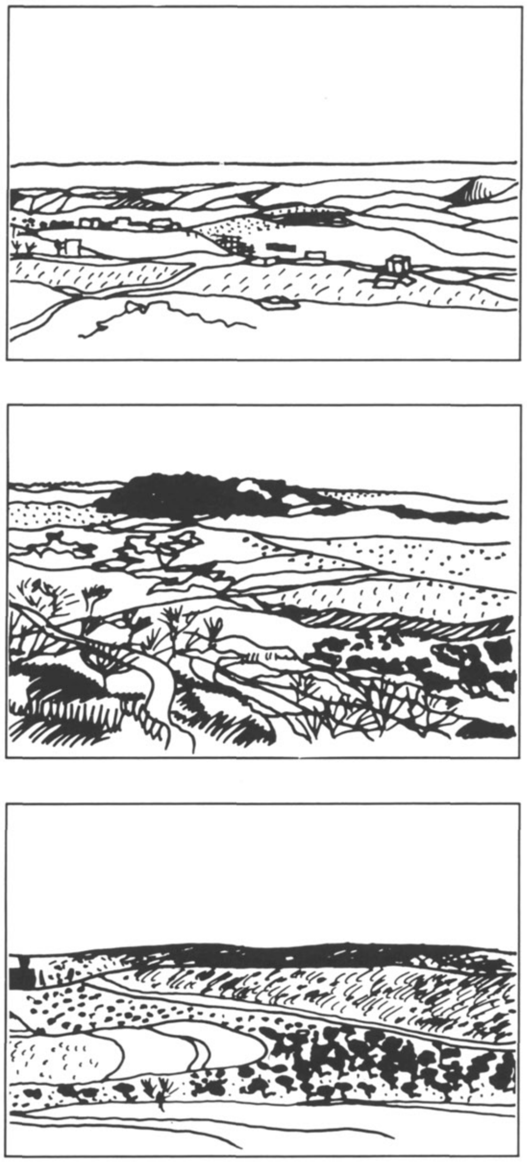


**7.11** *Model of proposal by Johnston. The proposal envisages settings for new religious institutions, recreational sites, and a new road based on linking several existing rights-of-way and providing access along the eastern edge of the open-space system.*

**7.12** *The concept of an open-space wedge between Jerusalem and Bethlehem is the central theme for Johnston's proposal. It aims at preserving the pastoral landscape for religious use, while maintaining fragile image of Bethlehem as a sacred place.*

7.13



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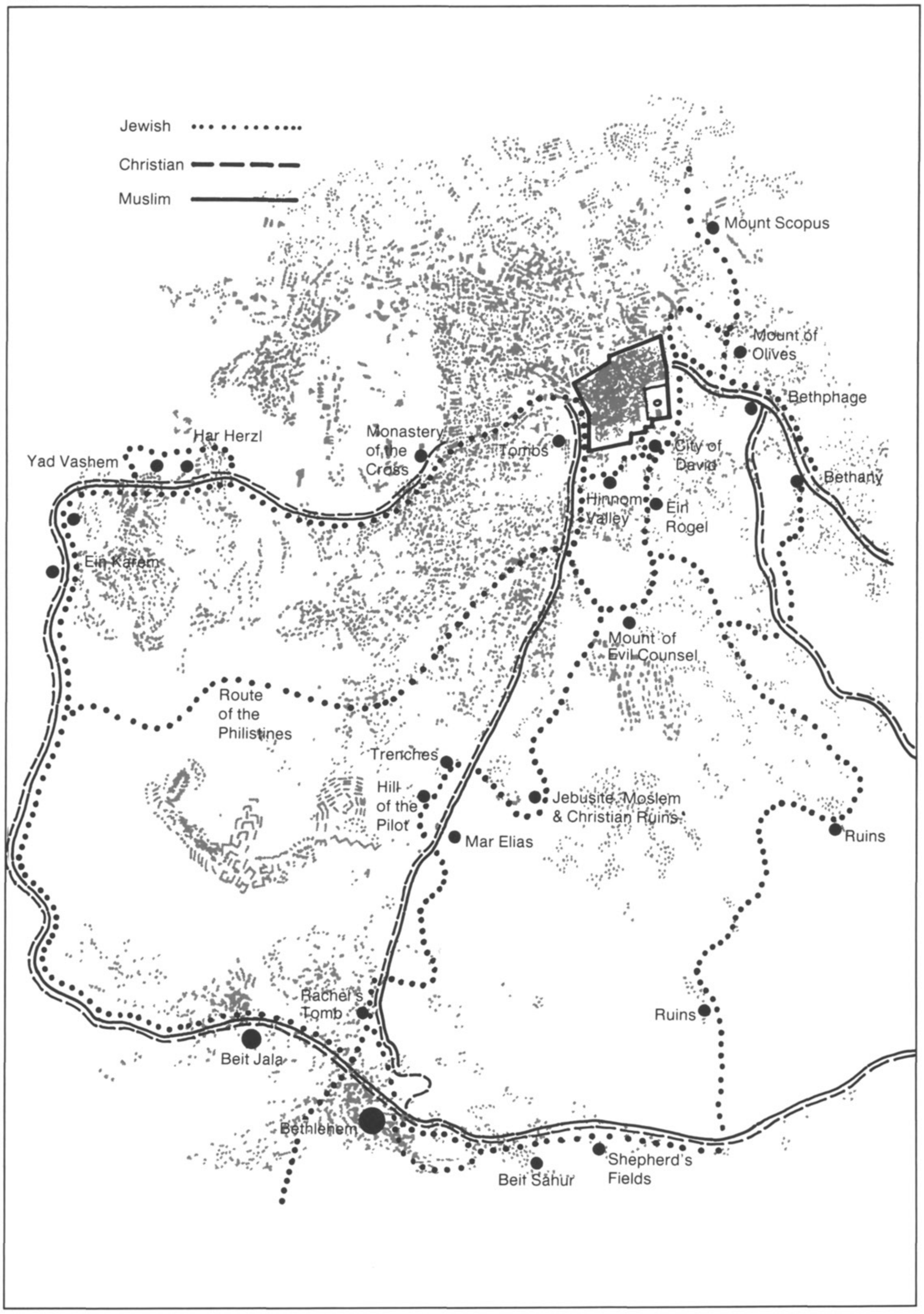
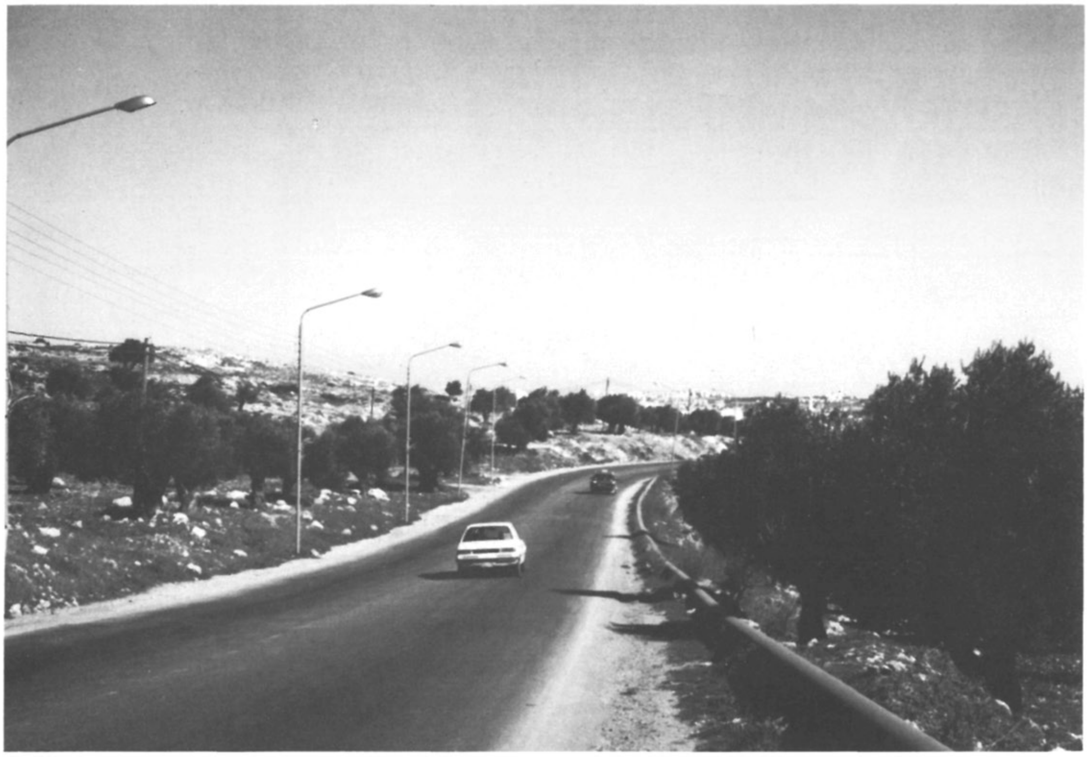


**7.13** *View along one of the paths identified by Dillard. The path closely approximates the Hasmonean (ca. 500 B.C.) aqueduct route from Bethlehem to the Old City. The route is designed in such a way that it passes through the major landscape and vegetation types of the region — arid desert (a), fields and forested hilltops (b), and olive orchards (c).*

**7.14** *Dillard's scheme uses the concept of open-space wedge in a more active fashion. It is accessible by foot or bicycle, and it identifies the religious routes — Jewish, Christian, and Muslim — and links them in a network of paths.*

**7.15 a**



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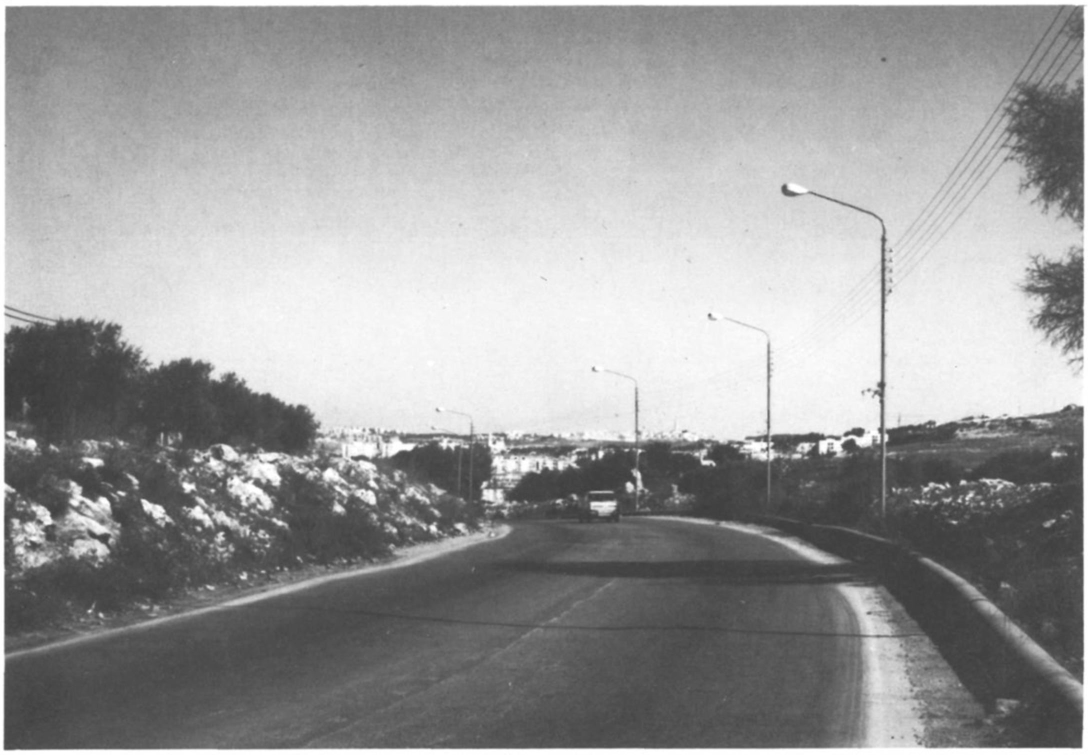
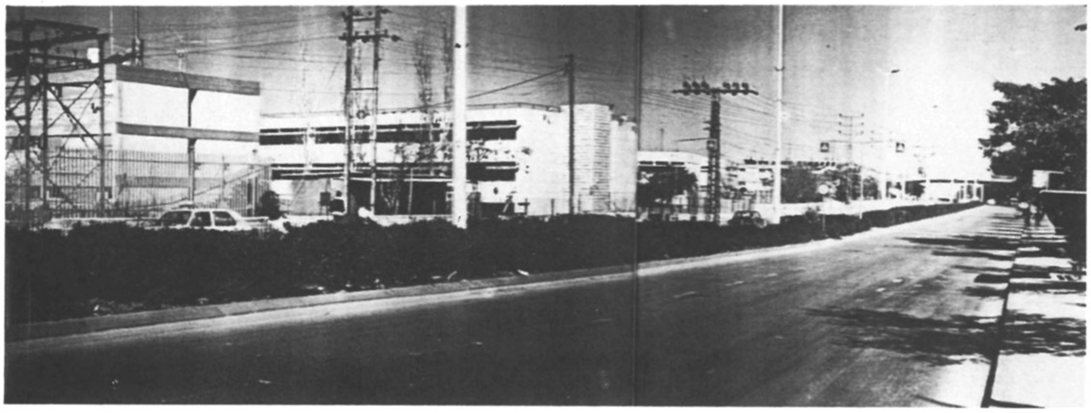


**7.15** *View from the Hebron Road entry from the south. A few steps away from the monastery of Mar Elias the road ascends (a) before the city of Jerusalem is viewed (b and c). One cannot help but be struck by the ugliness of the city's south entrance. Dillard proposed a simple but very effective device to hide some of the ugliness. The proposal calls for new landforms (d) adjacent to the road, which both block unsightly views and concentrate the sightline ahead to the Old City.*

c

d

**7.16a**



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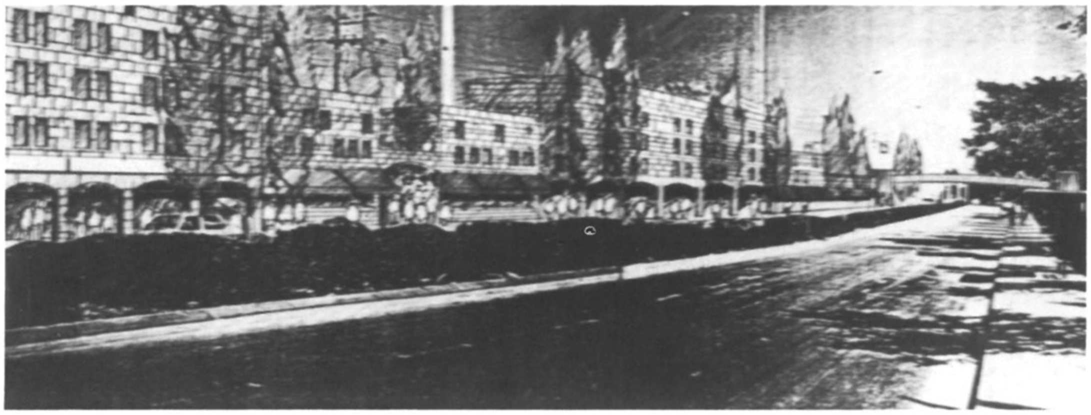


**7.16** *The proposal by O'Connor deals with the urban facade of the southern entry to Jerusalem along Hebron Road (a). The design proposes the reconstruction of the ends of housing blocks built in the 1950s and the reorientation toward the street face (b).*

## ACCOMMODATING THE GROWTH OF THE ARAB VILLAGES

The growth in the southern region was primarily in the Arab population. Israeli expansion took place in Talpiot west of the Hebron–Jerusalem highway in Gilo. Since no additional land had been expropriated by the government, Jewish expansion was clearly limited unless individuals succeeded in purchasing land from Arab owners. While this appeared improbable, it must be noted that Israeli developers have successfully concluded land purchases from private citizens in other parts of Jerusalem as well as the West Bank. Consequently, Arab ownership of land could not be deemed adequate long-term protection against urbanization by Israelis, and a clearly defined open-space policy was needed.

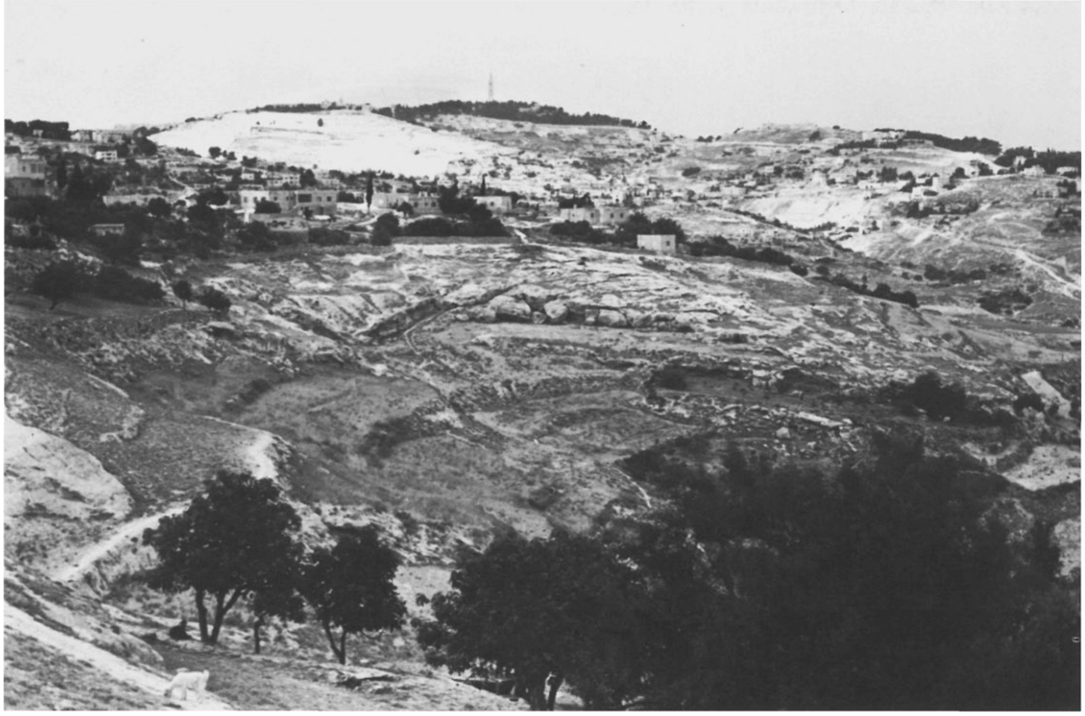
The situation in the Arab sector was rather different. The villages of Tzur Baher and Um Tuba were both expanding in the form of extremely sparse sprawl reaching out from the historic village clusters. Proposals by Alexander Calderon and Richard Graf would accommodate increased expansion of both villages while consolidating available land and forming firm edges between the desert agricultural landscape and the urbanized sections. Expansion of both villages could be accommodated on slopes not visible from the processional route.

The Calderon–Graf design was a compelling solution to the problem of expansion in the semi-rural Jerusalem suburbs, but their model looked more like a compact Tuscan hill town than the random sprawl bursting out of the historic compact villages of the hills of Judea. This was because they failed to recognize that their scheme required a radical change in the economic and social structure of the villages.

The villages in the outskirts of Jerusalem are a patchwork of different ownerships. Generations of subdivisions and transfers of ownership by marriages have resulted in a complex pattern. Not only are the parcels themselves complex in form, but individual parcels are often owned by several relatives unlikely to come to a resolution about selling or deparceling land.

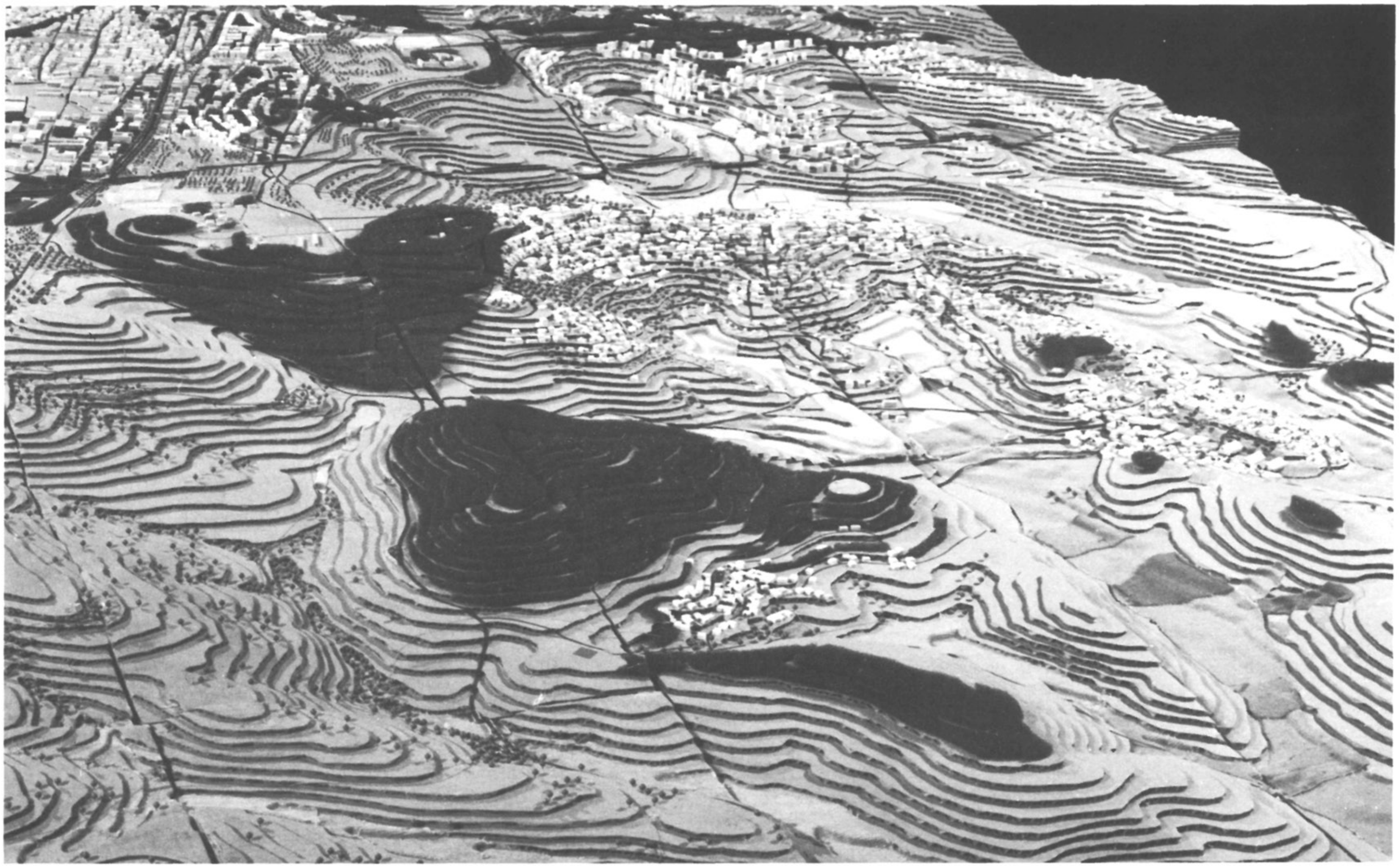
The pattern of sparse dispersal is the result in part of construction by families on the parcels they control. Once the land in the village is consumed, the young construct in the outlying areas where additional land is owned. The Calderon–Graf plan assumed that this complex parcelization could be overcome or that land could be reassembled and parceled out for development in the periphery of the village area regardless of current ownership. Such a plan would require that a committee of village elders, a kind of village development corporation, assume ownership and oversee reparcelization on some negotiated basis or that the municipal authorities expropriate the land, reparcel it, and sell it back to the villagers. Both methods are totally unrealistic: it is unlikely that an internal body could ever resolve the conflicting interests of the various families in the village; and the municipality of Jerusalem would never subject itself to the controversy nor take the political risks involved in what would inevitably be tribal disputes.

**7.17**



**7.17** *A traditional Arab village with the first new houses breaking away from the traditional dense core.*

**7.18**



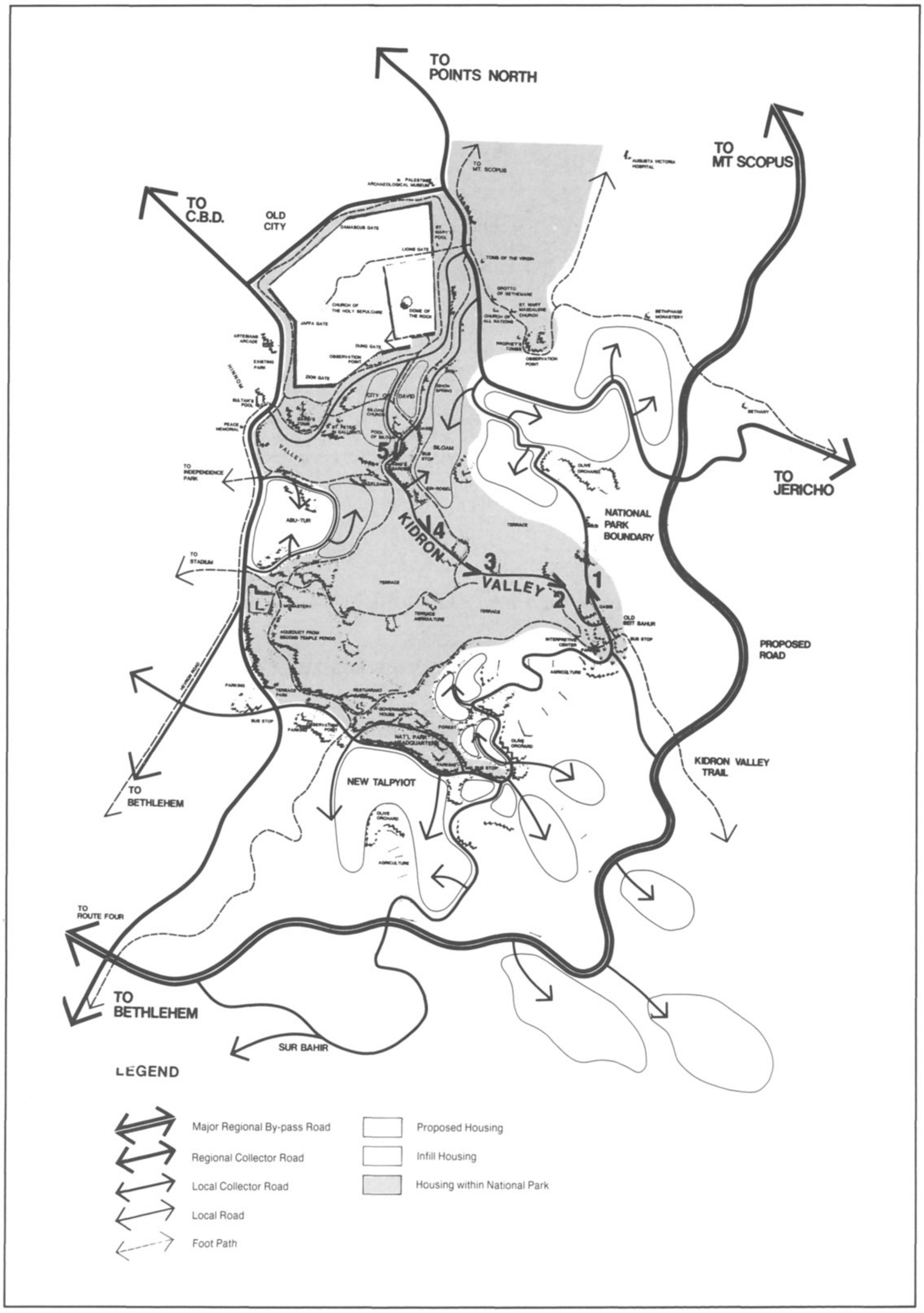
## THE KIDRON VALLEY

Recognizing that the Kidron Valley has a role in maintaining the character of the old Jerusalem as a city within the walls, the team of Larry Reed and Akihiro Shimoda proposed expanding the national park within the valley. In their proposal, they identified areas for landscaping and forestation, studied in detail the visual sequence of the eastern road as it entered the city, and identified areas for urbanization that would not be visible from the Old City.

**7.18** *Model of the southeastern sector of the region, where most of the Arab growth is expected. Graf and Calderon propose development of new Arab communities for 2,500 people that are structured around a religious, institutional, and commercial core adjacent to an agricultural valley.*

**7.19** *Proposal by Reed and Shimoda for the Kidron Valley area. The scheme proposes that access to the valley bottom be indirect and that as "special place," a fertile strip inside a mixture of agriculture and low-ridge development along the slopes, it be developed at "a slower pace." Private transportation is discouraged and public bus and taxi loops are provided.*

7.19



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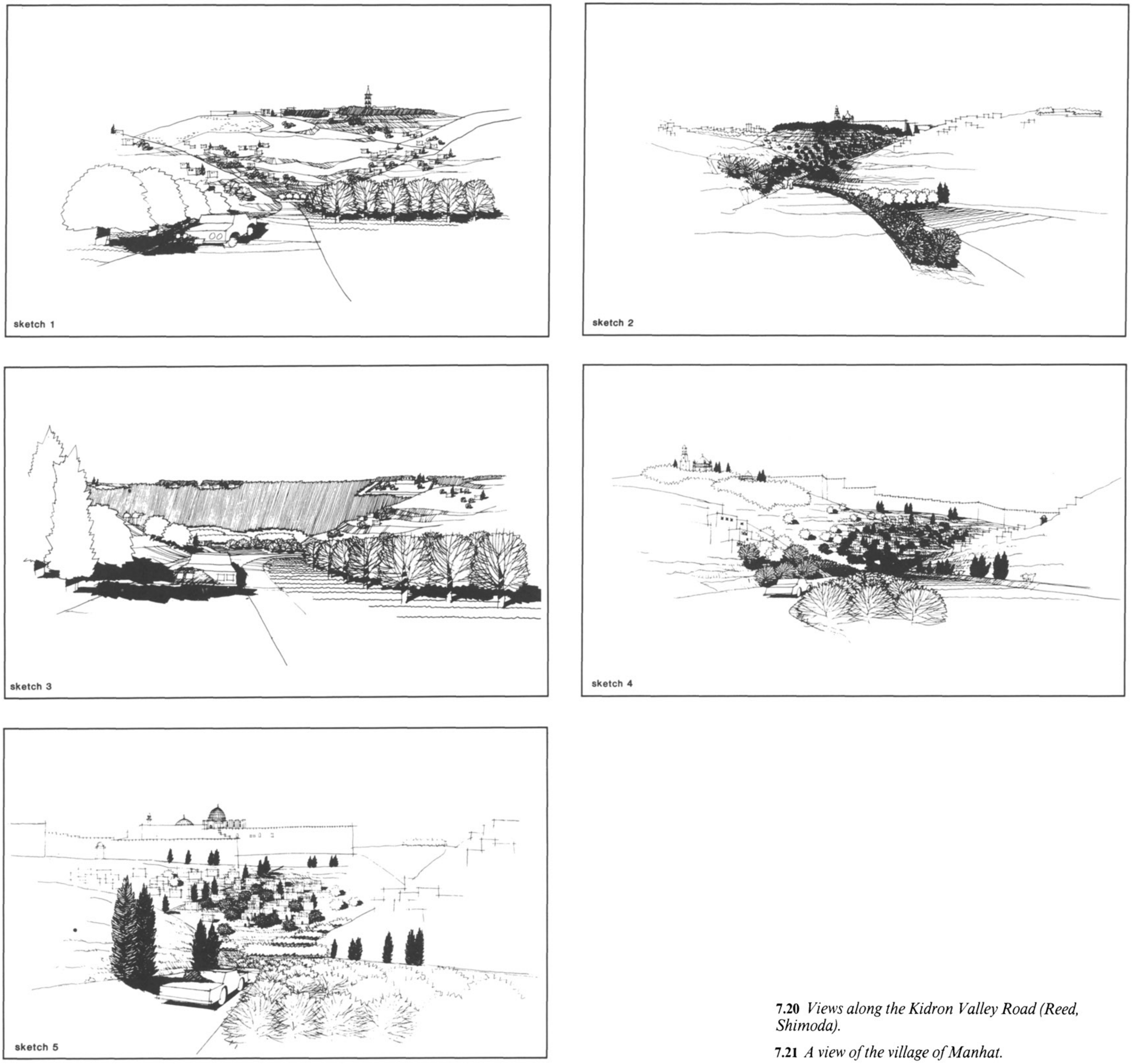


sketch 1

sketch 2

sketch 3

sketch 4

sketch 5

**7.20** *Views along the Kidron Valley Road (Reed, Shimoda).*

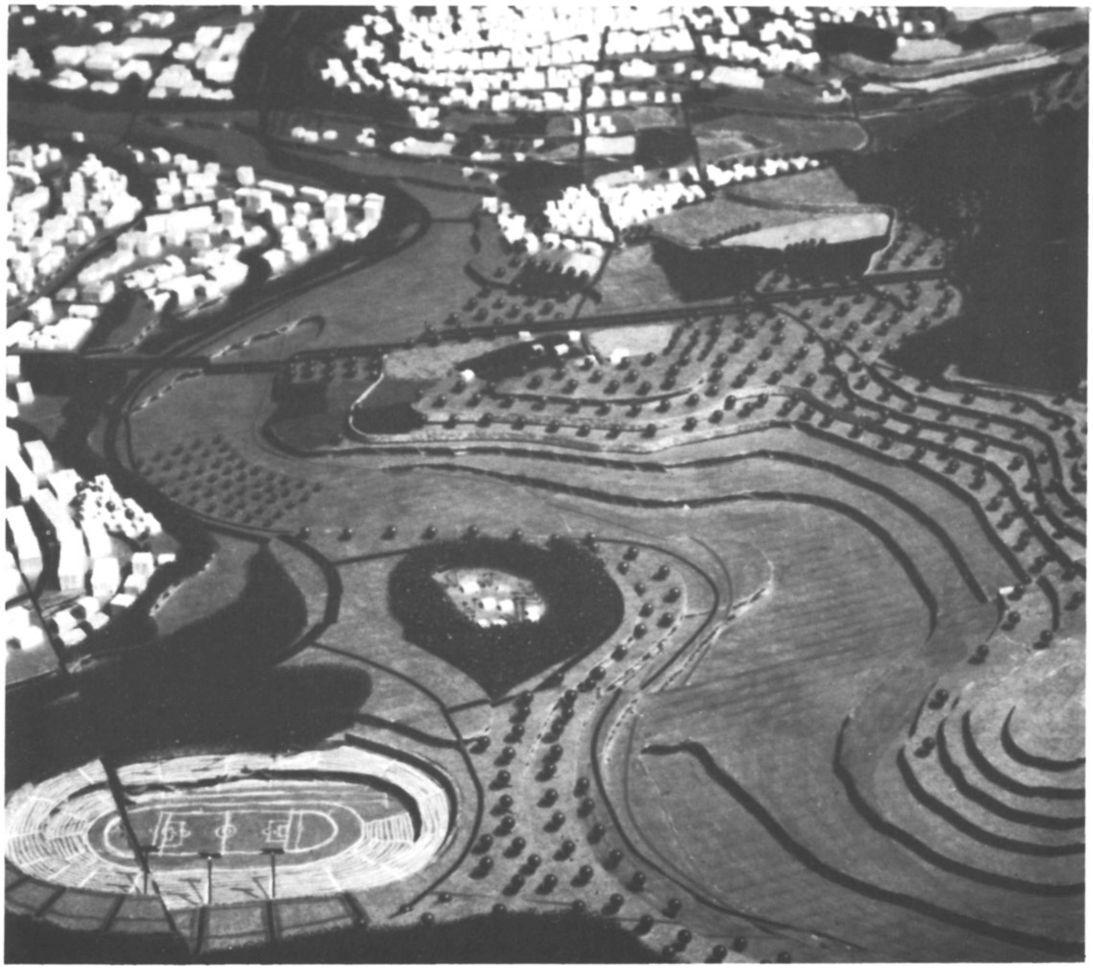
**7.21** *A view of the village of Manhat.*

## THE MANHAT VALLEY

The proposed alignment for Route 4 has it traversing the valley that separates the yet-to-be developed hillside of Manhat, upon which there is a small, old village, and Gilo. Crossing the valley perpendicular (east–west) to Route 4 is the old railway. The valley has been designated in official plans as the site for a secondary center serving the southern region. The team of Kathy Garcia, Richard Lyon, and Karen Phillips focused on the recreational potential of the valley. During their visit to Jerusalem, the students had become aware of the debate raging in the city about the location of a municipal stadium. Initially, the site chosen by the mayor was on the hill of Shu'affat, in the northern region, west of French Hill. The proposed site was the subject of intense opposition by the religious orthodox Jewish community, who feared that due to its close proximity to the orthodox neighborhoods and its operation on the Sabbath, it would disrupt their lives. A number of alternative locations were being explored, including the valley separating the Givat Ram, the campus of the Hebrew University, and the government compound and the Knesset. Those sites were also being opposed. Alert to the problem, Lyon proposed that the stadium be located in the Manhat valley, dug into the valley's floor. It would be accessible from Route 4. This proposal made an immediate contribution to Jerusalem. The idea was seized by the city engineer and the mayor, who adopted it and presented it for public review and approval.

**7.21**

7.22



**7.22** *A 100,000-seat municipal stadium is proposed by Lyon for the western part of the valley of Manhat. It is designed as a stadium built into a new landform. It is easily accessible from Route 4 and is remote enough not to be a nuisance to residential areas,*

**7.23** *A key map locating the Allenby triangle. The triangle represents one of the major development opportunities available in Jerusalem.*

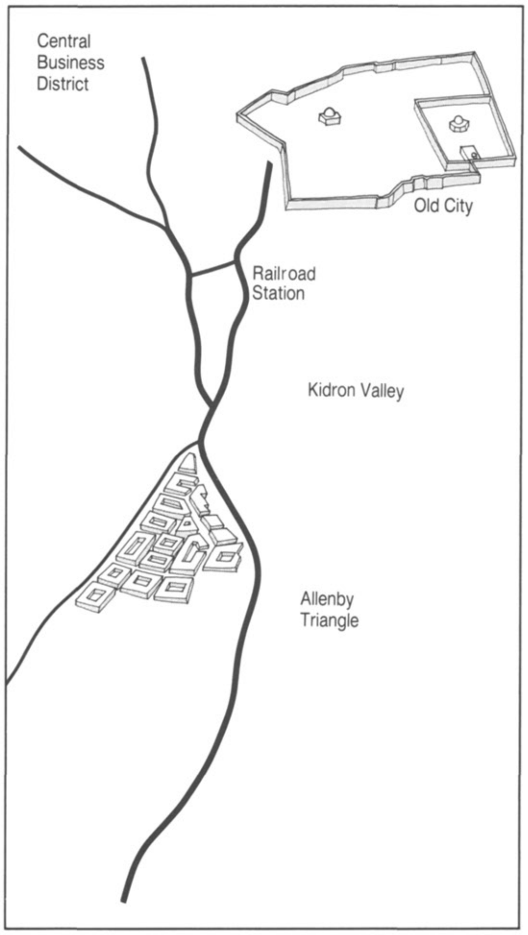
**7.24** *More views of housing clusters as proposed by Helfeld. Building height was carefully determined so as not to dominate the profiles of the city.*

**7.25** *Model of the triangle area as proposed by Irvine. The continuous urban fabric at the triangle area builds up to the view of the Old City across the open landscape of the National Park.*

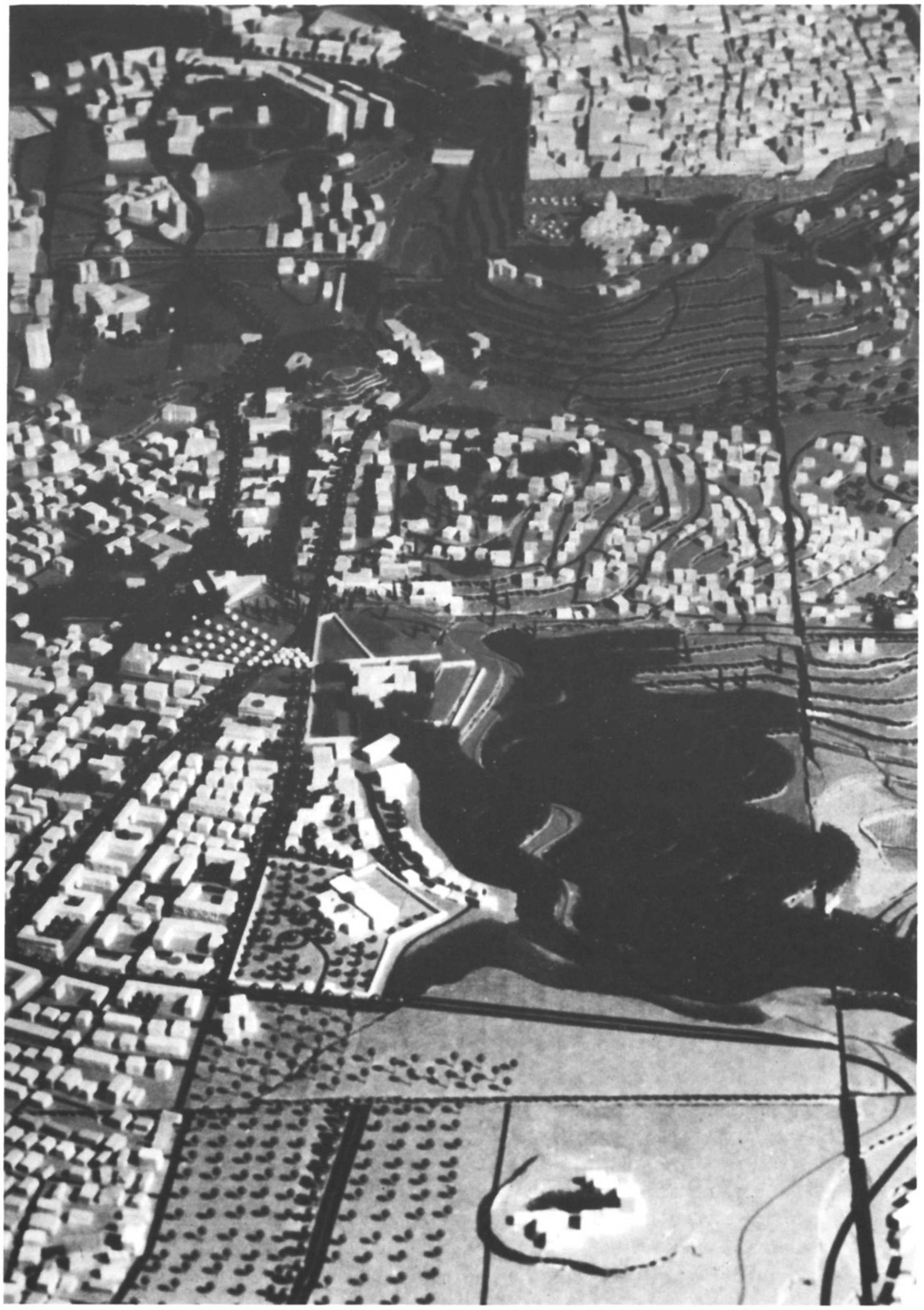
## THE ALLENBY TRIANGLE

The Allenby compound, poised along the Bethlehem–Jerusalem road at the edge of the visual basin of the Old City, represents one of the major development opportunities in Jerusalem. It is publicly owned, having been a former British military camp named after General Allenby, who led the British forces into Jerusalem in World War I. It is unequaled in terms of location: proximity to the Old City and the downtown; access from the south and the north; proximity to the national park in the valley of Hinom; and proximity to the cultural mile, which includes the Cinematique, the Music Center, Liberty Bell Park, and the Jerusalem theater. Taking advantage of the unique opportunity, Linda Irvine and Ruth Helfeld proposed a mixed-use, dense development of medium-sized buildings, not tall enough to dominate the profile of the city.

7.23


Central
Business
District
Old City
Railroad
Station
Kidron Valley
Allenby
Triangle

7.24



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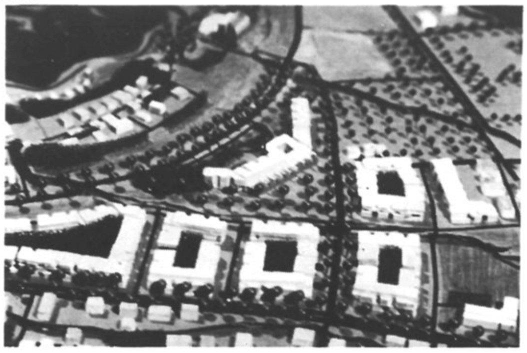

# THE RAILWAY STATION AND THE RAIL CORRIDOR

The presence of the old railway station along the Bethlehem road adjacent to the Allenby compound was a kind of anachronism. The line was built in 1892 to outdated standards. The train ride from Tel Aviv takes two hours, as compared with fifty minutes by car on the expressway. One train a day brings mostly sightseers and high-school kids into the city. The use of the line for freight is also limited. For several years the municipality has considered moving the station from its present location to the Manhat Valley, adjacent to the proposed secondary center. This would free the railway right-of-way from the secondary center all the way to the existing station for other uses. The land could be used for an important avenue providing another link from the southern communities to the city's heart. Several proposals were developed suggesting how such a transformation could take place. A design by Cynthia Plank proposed building guest houses, a hotel, and a strategically located park in the station area, which would enhance the Bethlehem road as it entered the visual basin of the Old City. A more comprehensive and far-reaching proposal developed by Garcia, Lyon, and Phillips recommended rebuilding a newly completed road to Gilo, extending the railway right-of-way to the city center, and improving and consolidating the development along the railway right-of-way in the Refaim Valley. The team also proposed expanding the Arab village of Bet Safafa, which would redefine the edge on the Refaim Valley.

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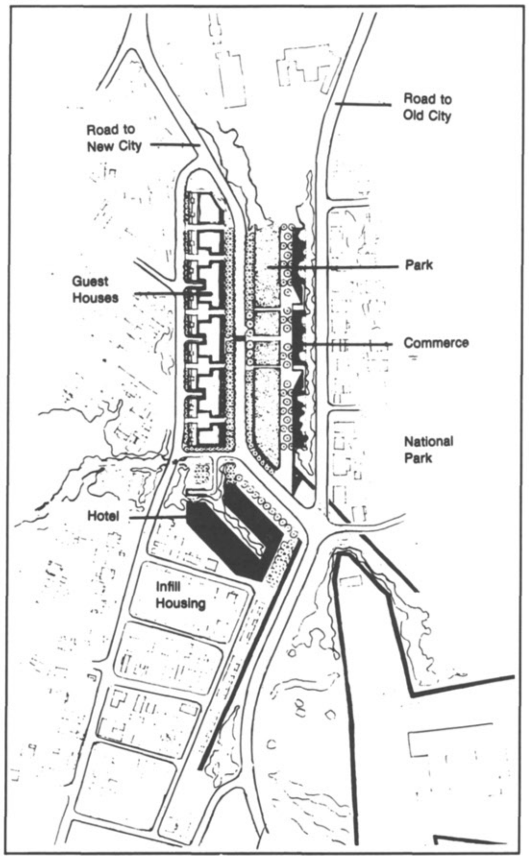

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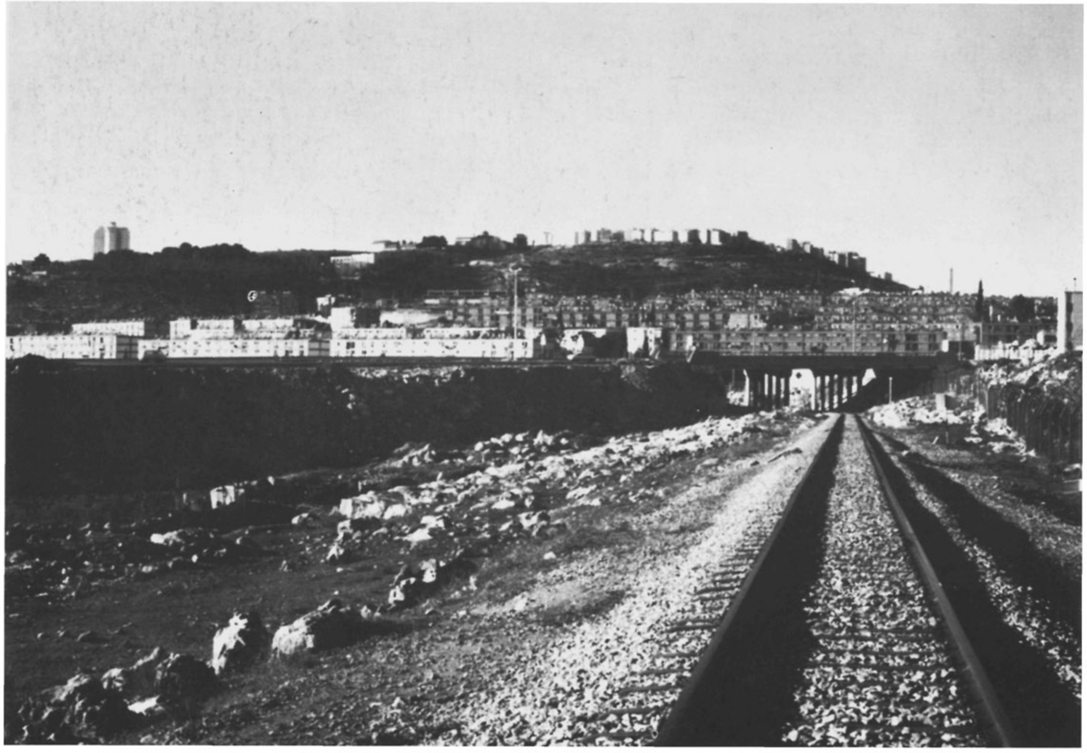
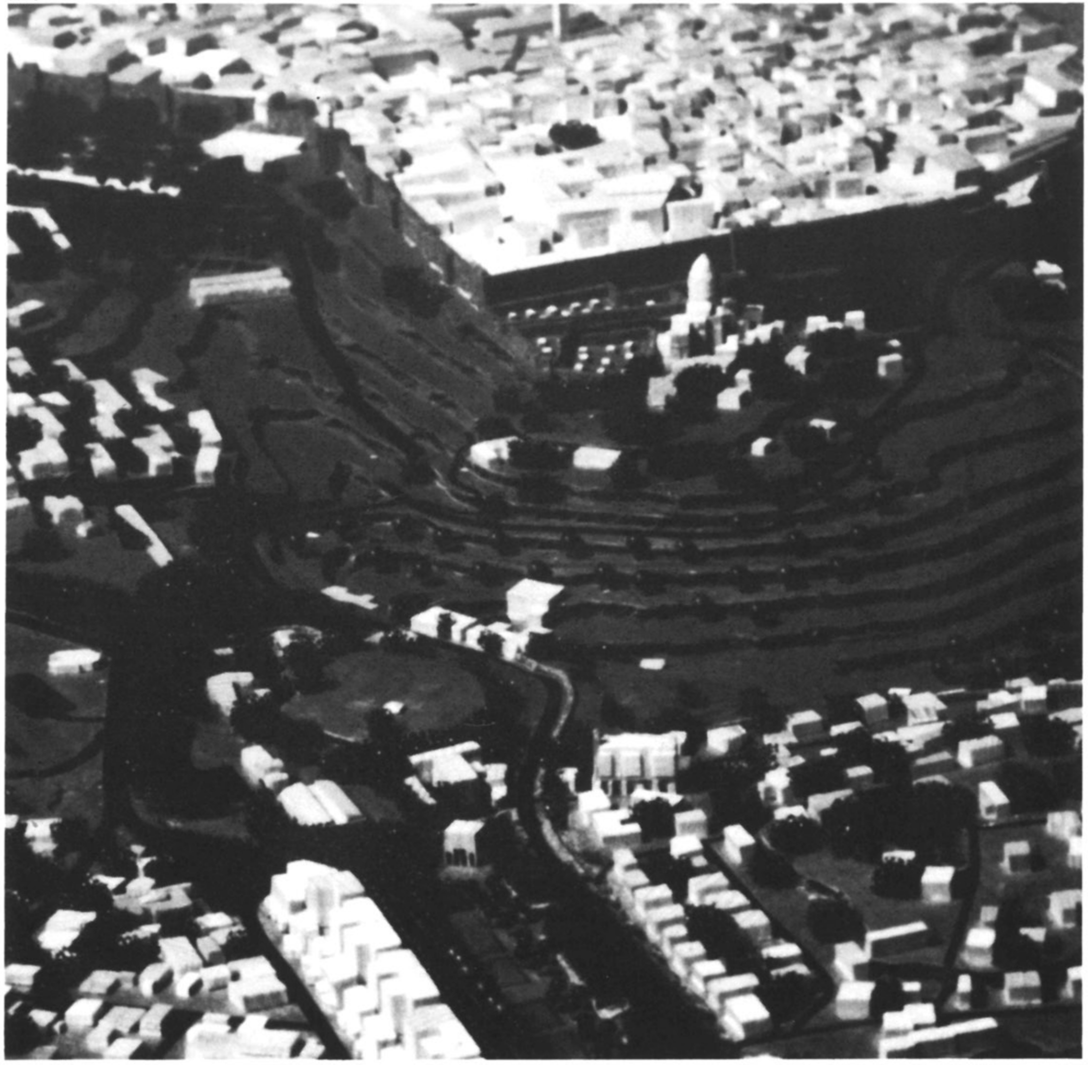


**7.26** *View of the old railroad tracks at the Refaim plateau.*

**7.27** *Proposal by Plank for the railroad stations. It envisages a new hotel zone and some commercial use and moves the intersection of roads further south from the point where the Old City is fully viewed.*

**7.28** *Model of proposal by Plank.*

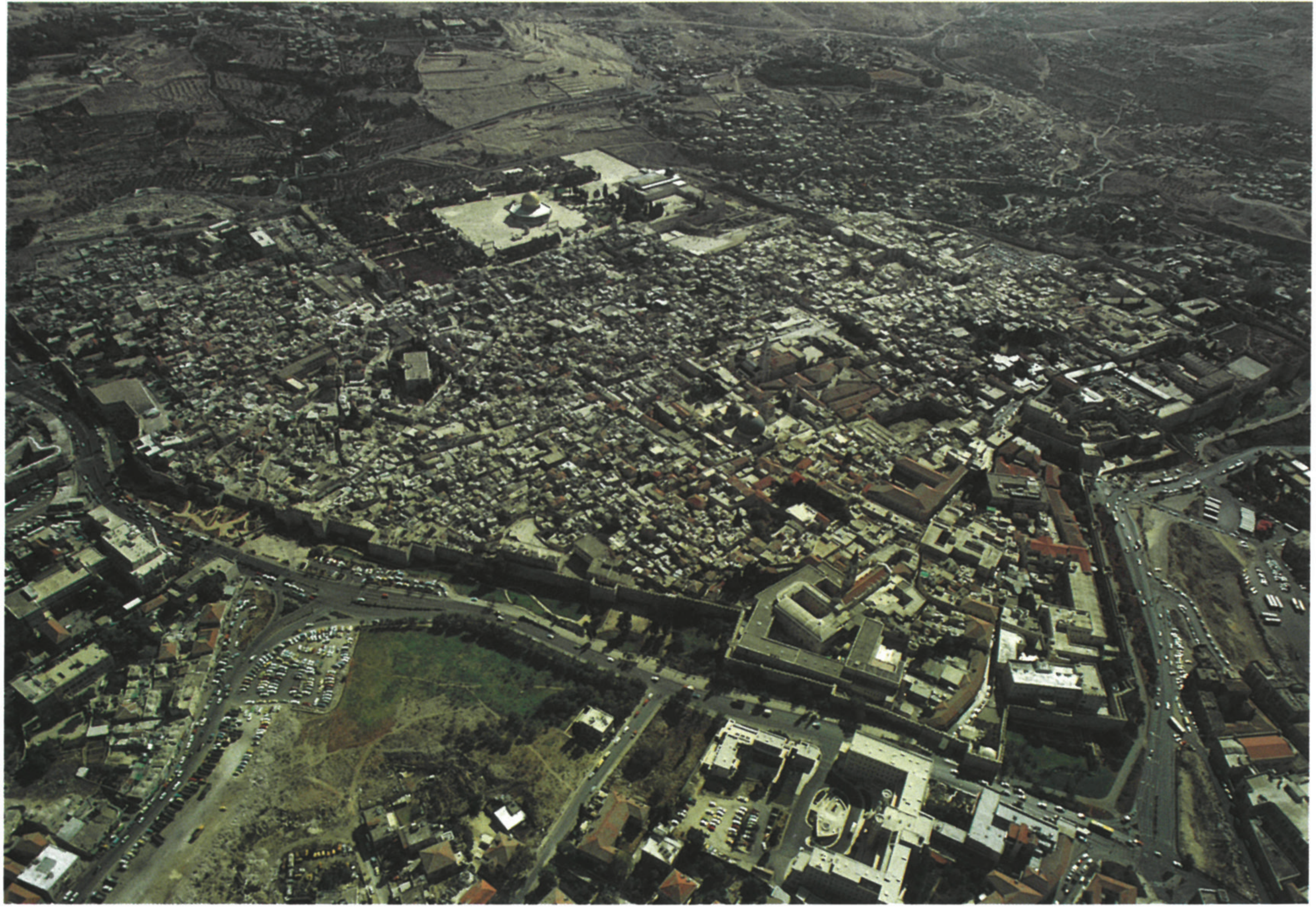
7.28



## CONCLUSIONS

The studies demonstrated the urgent need for comprehensive plans marking the limits of urbanization in the southern region. They further demonstrated that considerable expansion of both the Jewish and Arab communities of Jerusalem and Bethlehem was possible without upsetting the delicate balance between the cities. The vacant land parcels at the southern entrance to Jerusalem, such as the Allenby compound, could be developed in a way that would enhance the image and quality of life in that part of town. The studies also demonstrated that through modest investment in landscaping and forestation, dramatic improvements of the environment could be achieved. Perhaps most importantly, the work in these studios focused attention on the most crucial long-term issue facing Jerusalem: its fundamental identity as a separate city in the landscape.

8.1



# 8 DAMASCUS GATE: FROM THEORY TO REALITY

Three years of student studies left the Graduate School of Design charged with energy. Three generations of students had traveled to Jerusalem, studied the city, and developed proposals for it. The work was uneven, as student work always is. There were brilliant proposals, ideas that could serve the city well, and some projects without significance. But there was also a greater understanding of the city, a sense that the thoughts and ideas should not be lost, that a vehicle should be found to apply them in Jerusalem. We embarked on the search for a new mode, a new kind of engagement, that might offer the opportunity for further work on the city.

Of all the sites that had been studied, Damascus Gate and the large vacant parcel of land outside it stood out as being pivotal to the future development of the city. It was also an area where the most creative and exciting ideas were generated by the students and faculty.

A site that had been dormant since 1967, that had seen only minor road improvements, some tree planting, land fill, and truck parking, was about to undergo major change. As is often the case in Jerusalem, the catalyst for change came from an unexpected event: an American-based Protestant group was actively negotiating with the mayor of Jerusalem to relocate the Arab bus station which had been built adjacent to the Garden Tomb by the Jordanians in 1961. This group, believing the site to be the place of the crucifixion, was appalled by the noisy, polluted, and messy bus station that violated the holiness of the place. They were prepared to raise the money necessary for its relocation. The mayor, on his part, was to come up with an alternative site within a period of eighteen months. The only possibility for such relocation was the Damascus Gate triangle. Hence, the attitude that the area should be left for the next generation to tackle gave way to a revised policy that identified the site as the solution to the public transportation problems of this part of the city.

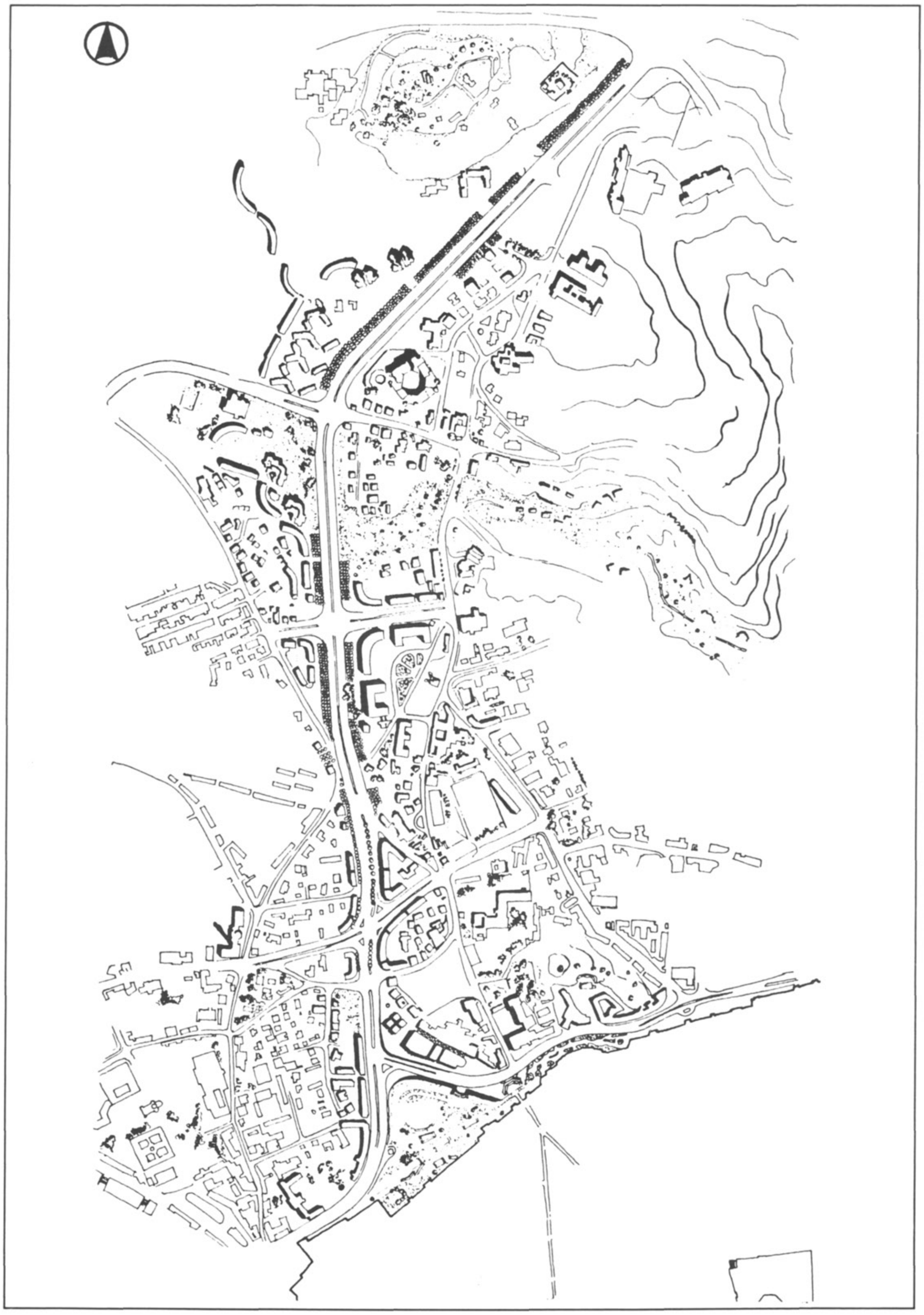
Discussions with the Christian group, represented by Mr. Jim Baker, president of PTL Television Network (North Carolina), precipitated a series of sketches by the city engineer's office. The plan proposed a particular alignment for Route 1 as it comes through the site from the north, some adjustment to the alignment of the road running parallel to the wall (Suleiman Road), and a tentative location for an open-air bus terminal. The faculty was appalled by the plans, which did not seem to do any justice to the great opportunity of the site and the moment.

Several of the schemes developed by the students for this area were outstanding in this regard. Yet we were aware that these plans were prepared in the vacuum and protective isolation of academia. Many of the practical problems — such as land ownership, existing underground services, particular traffic requirements, and demand by various interest groups (the owners of the trucks, the bus companies, the taxi drivers, the Old City merchants, residents of neighboring Musrara) — had not been considered in the students' proposals. A design to replace the official plan had to be developed in consultation and collaboration with the planning agencies and had to take into account the same set of complex constraints that had been considered by the city engineer.

It was at this moment that we decided to select three of the outstanding graduates from the School of Design who had taken part in the Jerusalem studios and who had been engaged in work on the Damascus Gate area and award them fellowships for an additional year in Jerusalem to develop plans with the municipal planning authorities. The idea was proposed to the sponsor of the studies, who was immediately convinced of its value and agreed to fund the fourth-year fellowship.

**8.1** *View of the Damascus Gate area.*

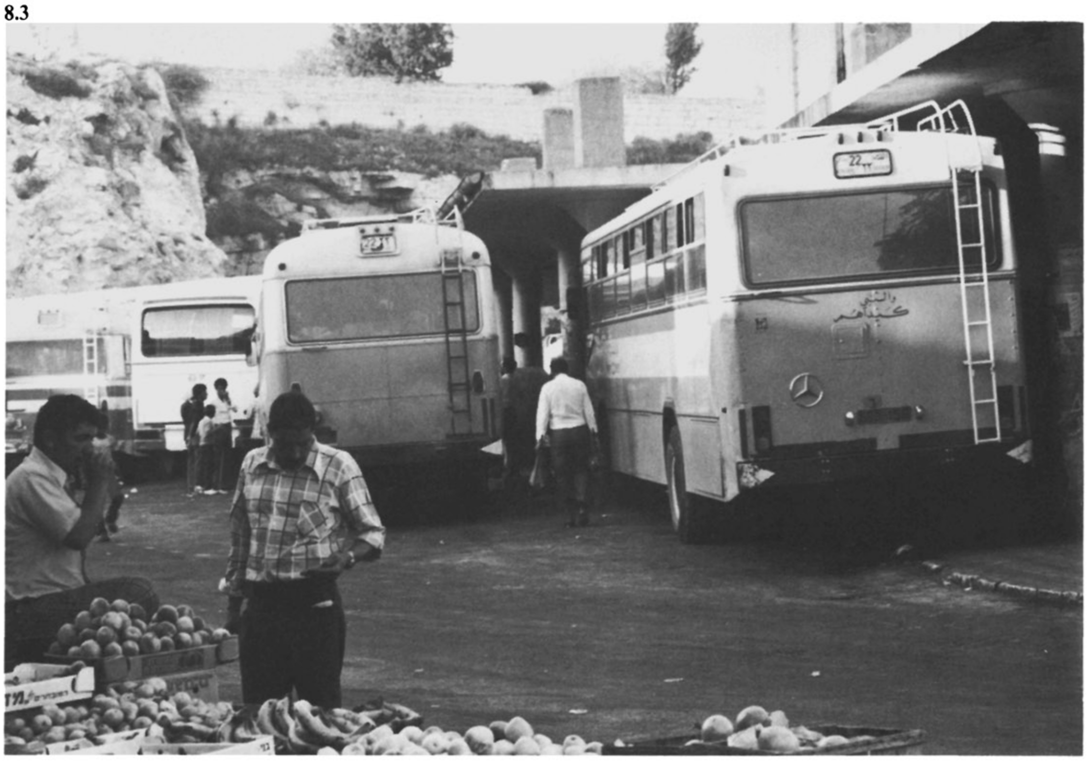
**8.2**



**8.2** *Site plan and road system of the "Seam" between east and west Jerusalem as proposed by the city prior to the Jerusalem Fellows' studies (Courtesy of the Municipality of Jerusalem).*

**8.3** *The Arab bus station at the foot of the Garden Tomb.*

**8.3**



Before the program could be initiated, agreement had to be reached with the municipality, the donor, and the university. Delicate legal matters had to be resolved. The university was not providing professional services to the city; rather, three talented graduates were being given the opportunity to develop plans that would be made available without charge to the municipality for implementation. The municipality had to agree to cooperate with their efforts, to supply them with space to work, to provide consultations with its various specialists from traffic to real estate law.

From the university's side, there were other concerns. The graduates represented top School of Design talent, but it was felt that the added advice of faculty was essential. With the graduates working in Jerusalem, a procedure had to be devised in which a faculty steering committee could regularly review the work and contribute to the process. The faculty advisory committee was established and included Dean Gerald McCue, Carl Steinitz, Fred Koetter, and Moshe Safdie, Director of the Urban Design Program and of the Jerusalem studios. The committee would meet with the fellows approximately every six weeks. Many meetings would take place in Jerusalem, where the faculty advisors could also meet with city planning officials. Additional meetings would take place in Cambridge, which would allow other faculty and interested students to review the work.

A three-way agreement was drafted: one between Harvard and the sponsor for the creation of a fellowship and one between the municipality of Jerusalem and the Graduate School of Design on the collaborative effort for Damascus Gate. The fellowship was advertised, applicants reviewed, and selection made. The three selected were Gene Dyer, Clifton Page, and Tod Johnson. Dyer is a graduate with honors of the Urban Design Program, 1981, and has a degree in architecture from the University of New Mexico. He had practiced in Albuquerque, New Mexico, before coming to Harvard to study in the Urban Design Program. Page, born in

Detroit, Michigan, graduated from the Architecture Program in 1982 and has a B.A. from Oberlin College. Johnson, born in Willmar, Minnesota, is a graduate of the Landscape Architecture Department, 1982, and has a B.L.A. from Utah State University. Gene Dyer was designated team leader. The three, with families, packed and left for Jerusalem in November 1982 and remained until December 1983. Page and Dyer had already developed plans for Damascus Gate in the studio. Both proposals had been recognized as outstanding. Johnson was partially involved with the Damascus Gate as part of his studies of the visual basin of the Old City.

The transformation from the protected environment of academia to the pressure cooker of the pragmatic world of Jerusalem planning was a shock to the fellows. Their office was located adjacent to the transportation planners, and they were at once immersed in roadway requirements, turning radii, minimum slopes, possible ownership patterns, and other constraints that appeared to make any meaningful proposal impossible. Perhaps the most demanding problem was the realization that any ambitious and extensive development on the site could not be contemplated at the present time. There were neither the resources available nor the slightest chance for its public approval. Instead a minimal first-phase plan would have to be proposed, at a cost comparable to the gift being given by the Christian group of three million dollars. A minimum program of road realignments and a sunken, uncovered, landscaped station could be constructed. This first phase, however, had to form the skeleton for a much more ambitious and far-reaching plan that would in time enlarge the bus station, add facilities for trucking and for serving the Old City, and create new markets and promenades. The minimal first-phase plan would be the one put forward for public review and approval. The ultimate plan would assure the municipality that this first move could act as the foundation for the full development of the site.

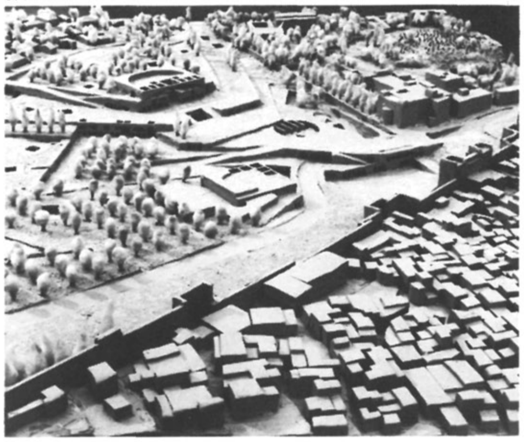
The fellows were aware of the controversy that surrounded the Mamilla plan, which had been presented to the public with an emphasis on its ultimate form at the end of a twenty-year development process. They realized that the mode of presentation would affect their ability to obtain approval for their plan. They were also immediately conscious of the possible antagonism of the local professional community toward a plan for one of the most critical parts of Jerusalem that was developed by outsiders. Hoping to neutralize the suspicions and antagonism, the fellows immediately contacted many of the professional groups and outlined their good intentions.

When they began their work, the fellows' first task was an in-depth review of the road realignment plan produced by the city engineer's department, which had already been submitted to the planning authorities for approval. Developing detailed cross sections through the site, they discovered, to their dismay, that Route 1, coming into the site from the north, bisected the site five meters above present grade and formed a divisive causeway between east and west. Similarly, the first-phase bus station aligned along the Street of the Prophets precluded a more optimal siting with the bus-loading platforms running parallel to the city wall. This was a delicate moment, because the plan, with all its shortcomings, was already rolling through the approval and review process. In an intensive three-week charrette they developed a new strategy. They realigned both Route 1 and Hazanhanim and shifted the first phase of the station toward the wall. They regraded the proposed road so that it would run close to the existing terrain and fit more harmoniously into the topography. They reviewed the proposed plans with the transportation consultants and satisfied the myriad requirements about the number of traffic lanes, turning radii, etc. Upon completion of their work, they presented the alternative proposal to Amnon Niv, the city engineer. Recognizing the advantages of the pro-

**8.4** *Gene Dyer's scheme for the triangle (with Parker and Wong).*

**8.5** *Clifton Page's scheme for the triangle (with Kapoor).*

8.4



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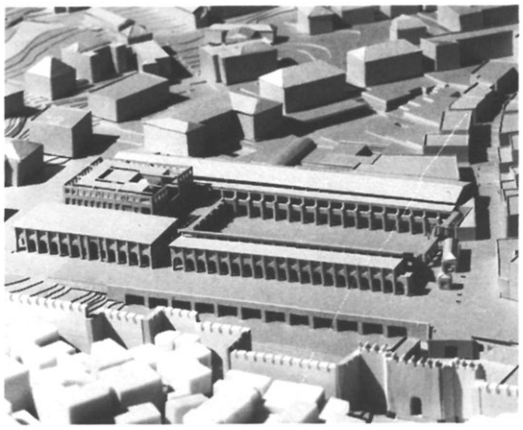

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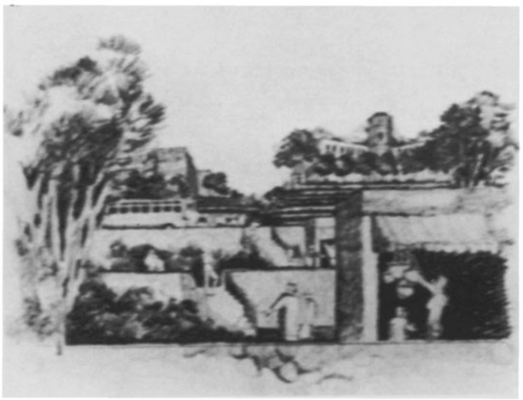


posal, Niv immediately withdrew the department's plan and submitted the fellows' plan in its place.

The next step was to clarify the activities and program for this large parcel of land and the longer-term objective of its image in the city. Should it be intensively developed? Should the twenty-five acres of vacant land on the site be primarily built upon? Should the functions and uses be primarily public transportation and services, retail and offices? or, as in the initial Dyer proposals, primarily institutions and transportation? Should there be residences? for Arabs? for Jews? Every question raised in the three-year studies about the ultimate program for the site surfaced once more. While there were subtle and sometimes obvious questions about potential activities on the site, a frontal conflict between two interests groups became clear. The land authority, owner of most of the area, favored intensive development, which would yield the greatest return on land. While the land authority was a trustee of publicly owned land and should therefore act free of commercial interest, in reality they acted in the same value-maximizing manner as any aggressive and ambitious developer in the United States. The enthusiasm with which land authority officials argued for intensive use of the land would make one think that they stood to personally gain from its increased value. On the other side of the barricade were the preservationist groups — the Society for Beautiful Israel and the Society for the Protection of Nature Preserves. Both argued that the site should remain predominantly open space, a park in the heart of Jerusalem. (This was almost a repeat of the discussion waged around Mamilla in the preceding decade).

But even the word "commercial activity" was subject to many interpretations. Was one referring to a seasonal or temporary market, like those along the ramps leading to the gate on holy Muslim days or like the summer melon markets along the Street of the Prophets; or was one referring to permanent shops, strung along streets; or, alternatively, to gallerias and malls with one or two shopping levels, third-generation products of the American suburban and urban shopping centers? Did entertainment mean discos and cinemas, or the more organized and elegant theaters? Was one talking of circuses or sidewalk cafés? places with waterpipes and turkish coffee, or fancy espresso and pastries?

As the fellows considered these options, the mayor called a meeting of the Jerusalem committee for the week of December 19–23, 1982. (The Jerusalem Committee, established in 1970, was an international volunteer group of eminent architects, planners, theologians, historians, and others convened by the mayor to advise on Jerusalem's development.) Attending the meeting were such notable architects, planners, and scholars as Aldo Van Eyck, Holland; Charles Haar, USA; Lawrence Halprin, USA; Britton Harris, USA; and from Israel, Arye Schachar, Amnon Niv, Moshe Cohen, Shmaryahu Cohen, Israel Levitt, and Mayor Teddy Kollek. High on the committee's agenda was a presentation and discussion of the fellows' proposals for Damascus Gate. The thrust of the plan was a strategy of slow phasing: a transportation facility built with a minimal budget would ultimately become the framework for the development of the whole site. The theme of their presentation was the informal grouping of spontaneous and shifting uses, seasonal markets, popular entertainment, transportation facilities; the emphasis was on the creation of extensive outdoor areas of landscaped piazzas and gardens. The fellows wanted to create the image of an expanded open-space system while filling the site with activity that would bring east and west, Jew and Arab, together. This approach, they believed, would appeal to the preservationists and open-space enthusiasts.

Van Eyck responsed enthusiastically and offered suggestions. While the edges of the site might be formed by permanent masonry structures to the east and west, the site itself should have a more playful and light character. Earthwork embankments and landscaping should be

**8.6** *Tod Johnson's illustrative rendering of the area in front of Damascus Gate (with M. Johnson, Ix, and Smithson).*

complemented with light steel structures, sheds, tents; the emphasis should be on changing bazaars, a circus, trellises and pergolas supporting vines and vegetation. Arcades could extend the natural topography as retaining walls and aqueducts. The meeting became a major confirmation of the fellows' continued work.

In the following two months, the fellows, working with the city's consultants, developed their plan. Added to the process was the Jerusalem Foundation, the implementing body to whom the gift of the bus station would be given, and the project manager, Dan Wind, who would coordinate the various efforts on the site. The fellows' proposal included the following key ingredients:

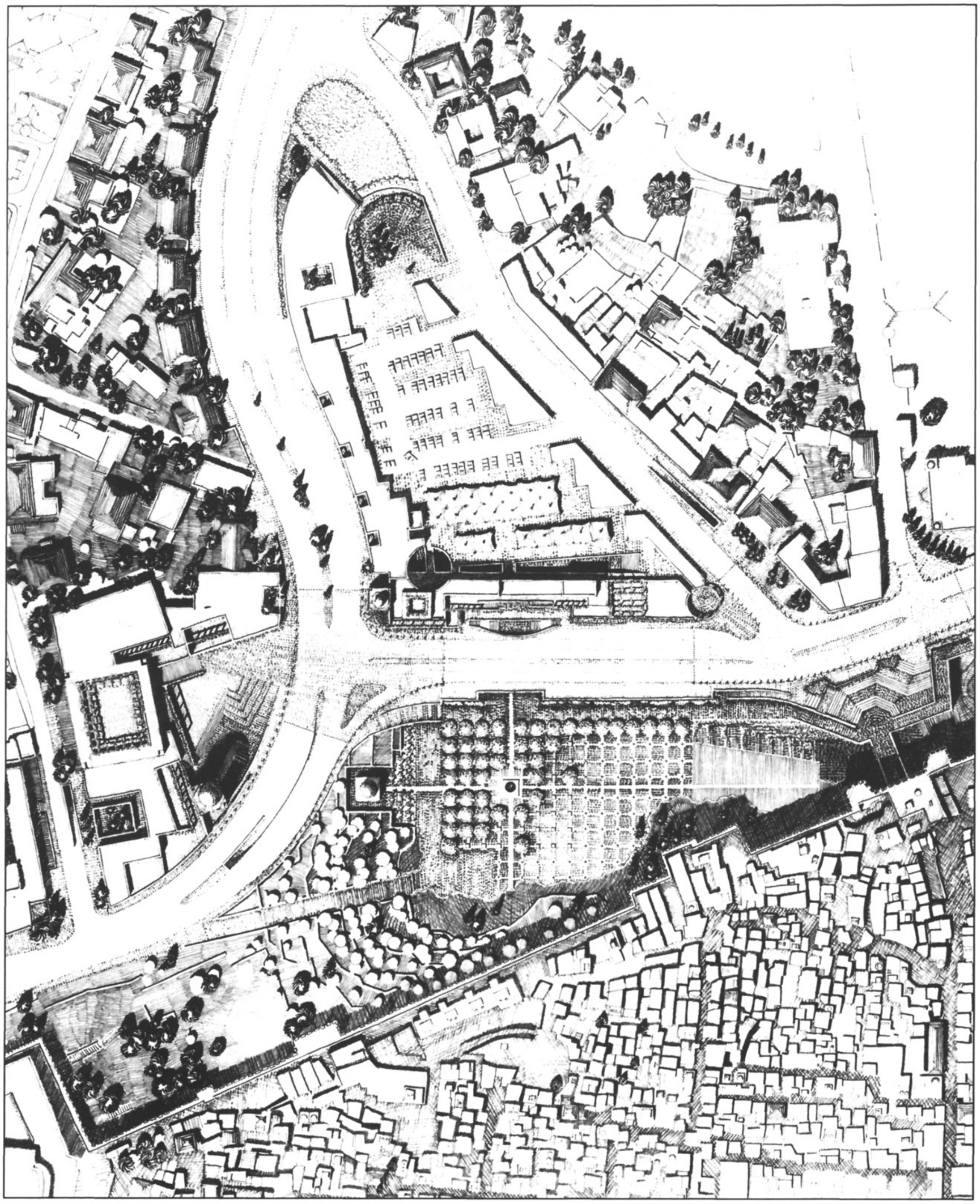
1. The bus station would be sunk one level below the general topography. In the first phase, landscaped embankments would shield it from view. The main passenger-loading area would run parallel to the wall along the rerouted Sulieman Road. That road would be built as an aqueduct, permitting the flow of people from the bus station under it into a large landscaped piazza between the road and the city wall and extending eastward into Damascus Gate.
2. The Street of the Prophets would become a service area with loading and unloading for the Old City. The existing row of buildings on the east side of the street would be restored and infilled.
3. On the west side of the site, Route 1 would define the edge of the bus station and would swing into Sulieman Road westward toward Zahal Square and Jaffa Gate. The western edge of Route 1, which had been scaled down to boulevard size as it traversed the site, would be lined with new residential structures extending the Musrarah neighborhood to its edge.
4. At the juncture points with Sulieman Road, a piazza would be formed on the axis of Notre-Dame. The edge of this piazza would be defined by new a structure and a museum of Christian history in Jerusalem, which would be part of the Notre-Dame compound.
5. A major arcade would run along the rerouted Sulieman Road from the Street of the Prophets to the newly formed piazza, marking, above grade, the location of the bus station and accommodating places for shops and access to the station.
6. In a subsequent phase, partial platforms would be built over the bus station to accommodate at street level taxi stalls and markets, none of which would rise more than one or two stories.

The fellows did not restrict themselves to the triangle proper. Their investigation of Route 1 as it entered the site convinced them that the artery had to be carefully studied all the way from French Hill, where it entered the urbanized area, to Damascus Gate. The official plan had called for this route to be transformed from a four-lane arterial to an urban boulevard south of French Hill. The plans indicated that the road would be lined with commercial buildings along its entire length. That concept seemed to ignore the actual nature of the terrain and the fact that Route 1 traversed the upper part of the Kidron Valley. The plan to build along its entirety would permanently block the valley, which was one of the principal open-space systems of the region.

The fellows proposed greater diversity in the character of Route 1 south of French Hill. As the road descended into the Kidron Valley, it would be kept on the existing topography. The valley would be preserved as an open space landscaped with traditional terraces and plants; olive, pomegranate, and fig trees; and the natural flora of the valley. As the road rises out of the valley toward Mandelbaum Gate and reaches the plateau overlooking Damascus Gate, it would intersect with a proposed east–west road connecting the Arab and Israeli central

**8.7** *Site plan of the Damascus Gate triangle area showing its relationship and connection to the Old City in the bottom; the Jewish neighborhood of Musrarah in the upper left; and the institutional and warehouse district along the Arab central business district to the east.*

8.7



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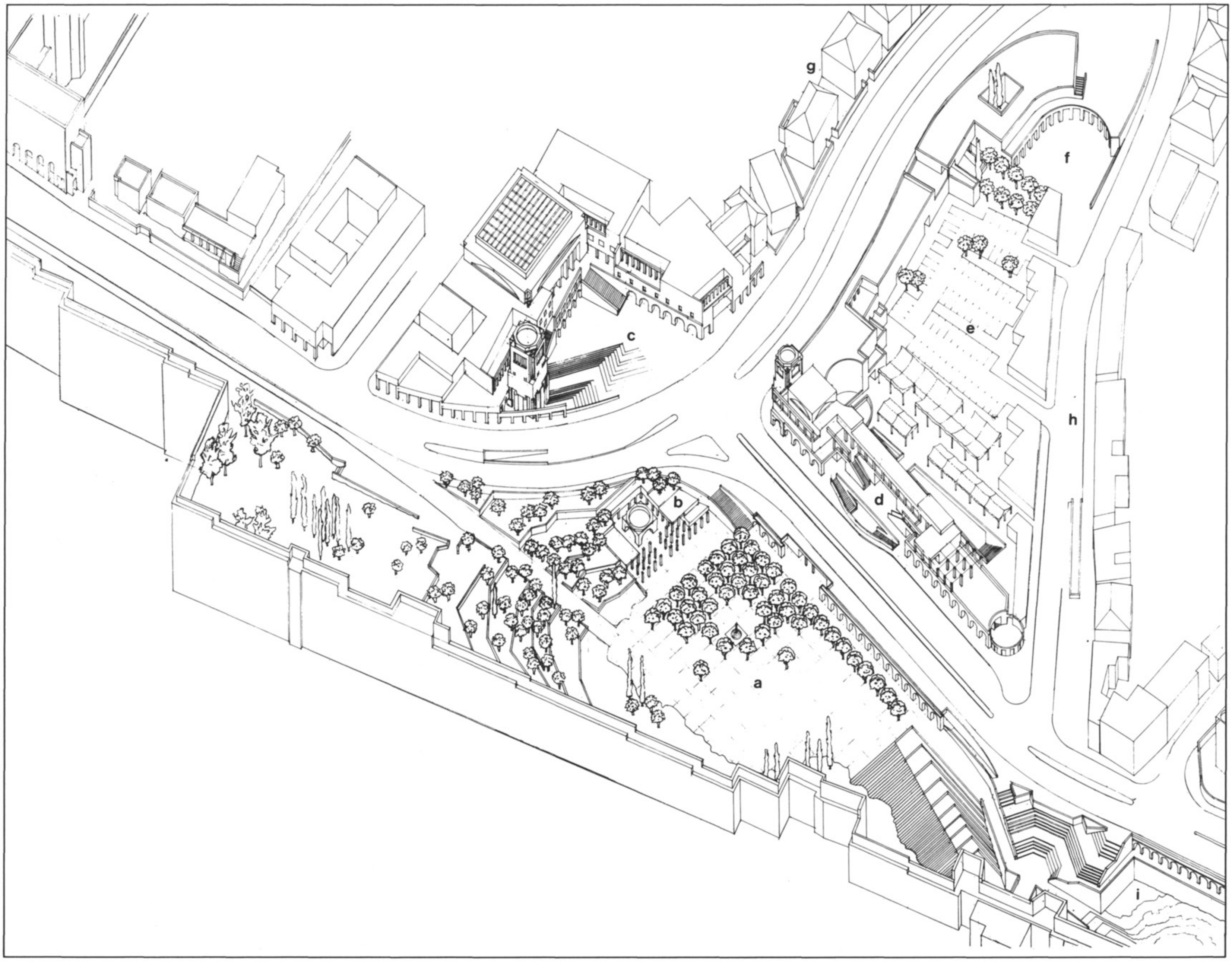


business districts. The fellows proposed that intense buildings define a gateway into the district. Thus the transition from a parkway to an urban boulevard would occur at this point. The road would then descend along Musrarah, perpendicular to the city wall, and swing westward to Jaffa Gate.

Several months of intensive development followed. In several meetings with the faculty advisory committee, details of the plans were discussed. The fellows found themselves caught in the middle of conflicting attitudes. The city engineer, the transportation planners, and the project manager were impressing upon them the immediate and pragmatic issues, such as the limitation of funds, and were steering them toward the path of least resistance. As the fellows tried to respond to these voices of pessimism (or realism, depending on one's view), they were confronted by the faculty committee, who insisted that they think big, that what this site needed was a vision, a powerful idea that would allow incremental phases of construction to hold together, and, in time, make this the real heart of the city.

From the outset the fellows realized that they would have to come up with one major gesture, a singular and powerful idea that would hold together the parts of the site and that would order the chaos and disorder around it. Each of them had explored that within their individual projects in the past. Now they had to agree upon a single strategy. As the project evolved, that central strategy emerged. A single line, running from the crossing of the Street of the Prophets and Suleiman Road in front of Damascus Gate westward to Notre-Dame and Route 1, would become the spine of the site. Sulieman Road would be realigned and would run as an aqueduct along this axis. The bus station would extend north of it and a magnificent grand garden piazza contained between it and the city wall. In time, the aqueduct-like street would expand. Masonry colonnades would rise above it. Trellises, sunshades, shelters covered with planting would span above. Small service buildings, pavilions, and little towers would plug into it, defining its eastern and western extremities. Everything else on the site related back to this central axis. Even the first move of the bulldozers excavating the sunken area for the station would be contained by this line. Thus, a minimal line marking the limits of excavation would in time become one of Jerusalem's central promenades.

In May 1983, the fellows returned to Cambridge and presented their work to the faculty and students at the Graduate School of Design. Encouraged by wide support, they returned to Jerusalem and launched a series of public and semipublic presentations. In this they were encouraged by Amnon Niv, the city engineer, who, backing the plan he had helped nourish, was now searching for support in the lay and professional communities.

As is always the case, there were those who questioned the validity of the proposal, and alternate proposals were soon forthcoming from other professionals in the city. The strength of the plan and its compelling quality emerged and its standing was enhanced by the alternate proposals. It won hands down. With the support of Niv and the mayor, the acceptance of the transportation planners, and respect within the city, the officials decided that the plan should become the basis for public action and that the proposal should be translated into the legal documents required for submission to the district planning committee for public hearings. As work on the official submission began, the year was up. Dyer, Page, and Johnson returned to Cambridge.

There were unanswered questions. How would the plan be implemented in detailed phases? How could the fellows continue to provide their input in the adjustments and changes that invariably would have to be made? Clearly, as the plans moved into implementation, the input of the designers would be required. These were problems for the future, but they had to be addressed. It was agreed with the municipality that, as the plans moved toward realization,

**8.8** *Axonometric view from above the Old City and Damascus Gate showing the various urban components of the triangle proposal: a. Civic Plaza; b. entrance to public parking; c. Institution Square with major new institutions around it; d. shopping arcade above bus station; e. taxi stations; f. entertainment center for night activity; g. infill of new structures at Musrarah neighborhood; h. development of both sides of the Street of the Prophets as a service street to the Old City; i. excavated historic quarries.*

local consultants would be hired for their implementation; but a portion of the fee would be designated to enable the fellows to return to Jerusalem and participate in the evolution of the scheme.

The assessment of the fellows' plan was not easy. It was infinitely superior to the preceding official plans, but these had been carried out under the pressures of expediency and limited manpower. Even more difficult was the comparison of the plan with the preceding student proposals executed in Cambridge. The plans developed in the atmosphere of academia clearly did not have to deal with the unavoidable constraints that the fellows could not ignore. But it is precisely the atmosphere in which the plan was developed that gave it complexity and richness. Many schemes were more dramatic and carried out a singular idea to greater extremes. There were the plans with the grand piazzas, equaling in scale the Maidan in Isphahan. There was Dyer's own proposal, which transformed the entire site into a pastoral landscape with a few protruding pavilion-like structures. There was Page's sunken piazza and austere colonnades. In contrast, the fellows' plan seemed somewhat clumsy, with a quality, in parts, of almost contrived disorder. On the other hand, it had that particular quality achieved by effective use of minimum resources — a kind of exactness and economy of means. It also struck the right balance between a place that was essentially an active urban zone and one that preserved an open character. Unlike many earlier proposals that packed the site with shopping arcades, offices, and residences, in an attempt to meet the objective of creating an animated and alive urban place, the emphasis here was on intense activity, day and night and in all seasons, with a minimum number of structures. They drew the energy from the movement of people coming and going from the transportation network and focused on informal markets, gardens, and piazzas rather than on hard and massive commercial facilities. In so doing, the fellows also avoided the trap of creating a pseudo-western or American environment at the gateway to the Old City. Market sheds poised over the bus lanes, the colonnades and arcades, were no Faneuil Hall or Copley Place. They did not contain department stores or require sophisticated retailing. The area was a natural expansion of the Old City markets, its cafés, and services.

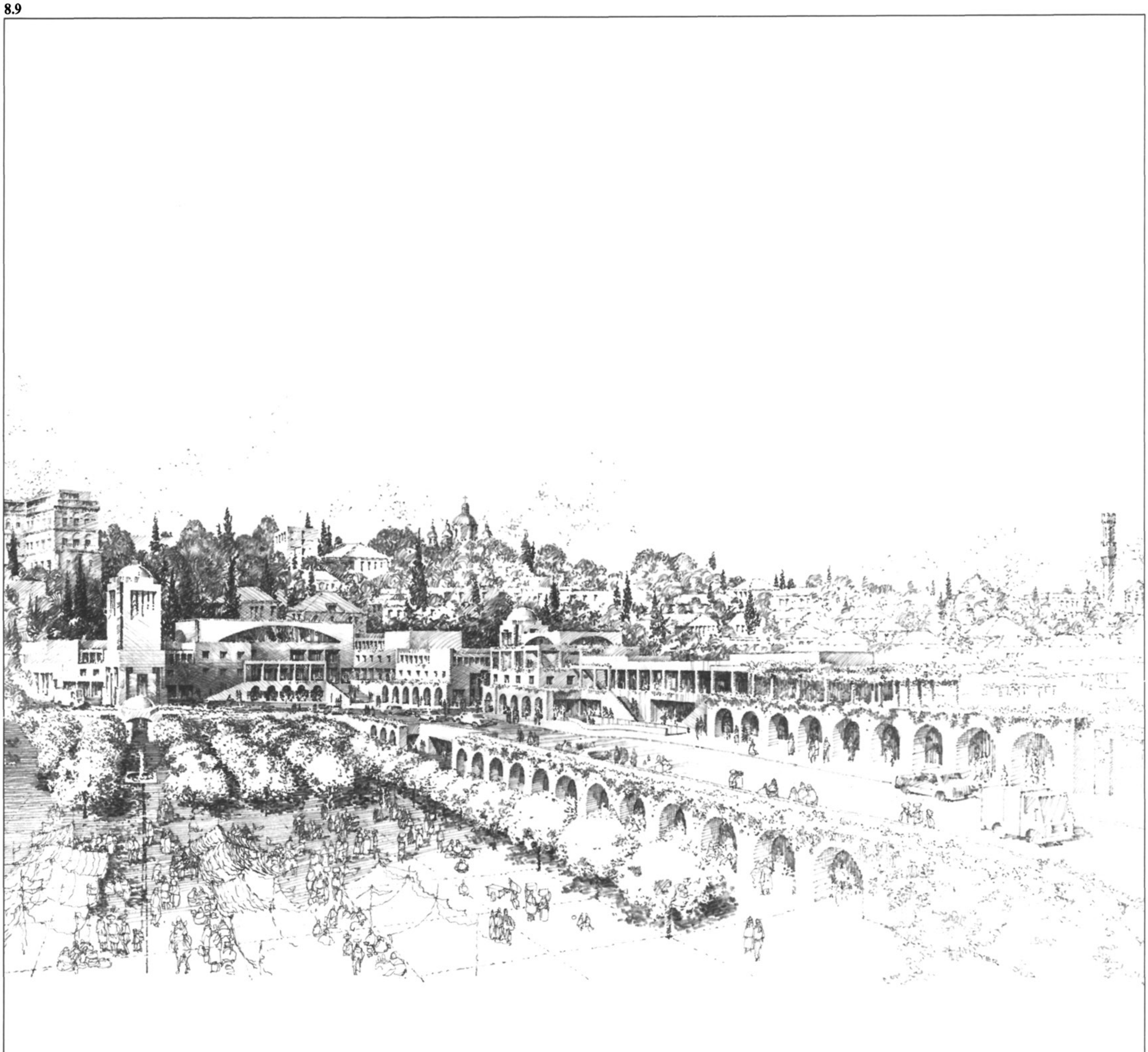
The program was thus truly indigenous, drawing on the traditional life of the city and its contemporary manifestation rather than importing models from Tel Aviv or more distant shores.

But if the plan drew in a romantic sense on the life-style of the city, the fellows had greater difficulty resolving the architectural language of their buildings. Van Eyck had spoken of great stone terraces and colonnades, of steel trusses and sheds, and hinted at a kind of architecture that is almost landscape in nature. He envisioned an extension of the terrain covered with a delicate architectural layer of steel and aluminum members, cables and canvas — a thin layer of elegant contemporary inventiveness over the biblical terrain. And while certain parts of the design uneasily leaned in that direction, the major stone buildings and arcades of the scheme evoked the imagery of the British mandate architecture of the 1930s: the YMCA, the Governor's Palace at the Hill of Evil Counsel, the Rockefeller Museum, and domed towers descending upon massive stone bases, towers with small apertures — a western overlay of eastern imagery, not unlike Lutton's great structures in the heart of New Delhi.

To some it seemed that if the fellows had allowed themselves to be more relaxed about recalling Jerusalem's historic romantic imagery — had developed with greater boldness a new architecture of public shelters and great civil earthworks, terraces, walls, and causeways — a more powerful and timeless imagery would have emerged as the setting for the hustle-bustle of Mediterranean activity.

**8.9** *View from the top of Damascus Gate toward Institution Square, overlooking the Civic Plaza. The shopping arcade above the bus station is to the right. The neighborhood of Musrarah is in the background.*

8.9



The effectiveness of the one-year fellowship in developing plans for this area highlighted the predicament of the municipality. In the fellows' absence a much less carefully prepared and developed plan would have gone into effect and prejudiced the quality of development in the area for generations to come. In the past, the municipality had relied on outside consultants to develop plans for sensitive sectors. Such was the case with the Corporation for the Jewish Quarter in the redevelopment of the Old City or the East Jerusalem Corporation for the restoration of Yemin Moshe or KARTA for development of Mamilla. Similarly, the Ministry of Housing retained consultants to design the new neighborhoods — Gilo, Ramot, and the others. Often the retaining of such consultants was carried out through related public agencies. But by the late 1970s, Niv, with the backing of Kollek (and before that, Benvenisti, as deputy mayor of planning) shied away from assigning important sites to consultants. Perhaps troubled by the controversy that surrounded some projects (for example, Mamilla), perhaps concerned with the difficulty of controlling consultants, they opted for trying to carry them out in-house. The municipality, however, did not have the manpower or the talent, perhaps because of limited resources, to carry out this work. The city engineer himself was stretched thin, dealing with a multitude of projects in the entire region. Unlike Philadelphia in the days of Edmund Bacon, Boston under Logue, New York in the days of Jaquelin Robertson during the Lindsay Administration, there was not a pool of enthusiastic and talented people working within the municipality. Hence the city is shortchanged: major projects are not assigned to outside consultants while the necessary in-house talent is not built up.

Hence, incomplete and superficial plans become the basis for action. The impact can be felt at all scales. An elaborate plan for the Ben-Yehuda pedestrian mall by Larry Halprin was rejected in favor of an in-house plan of dubious quality. This is not to say that all work assigned to outside consultants will necessarily be of superior quality. The history of planning in Jerusalem is living proof of the unevenness of such input, but the elimination of outside consultants without their replacement by committed talent, as demonstrated by the fellows, is even more dangerous.

Jerusalem must decide: if it is to pursue the construction of significant new sections with plans developed within the municipality, a complete reform and reorganization is urgent. The city must find the means to attract the necessary talent and to create an appropriate method of direction, guidance, and control. This is a task beyond the capacity of any single individual. The city engineer must focus on selecting the talent, setting the criteria, and establishing the procedure for evaluation and implementation. But it is not an effort that can be carried out ad hoc, nor one that can be left to chance. Alternatively, the combination of outside consultants and teams from within the municipality might offer, for Jerusalem, an interesting alternative.

But for the moment, there was a sense of triumph. Three years of academic study led to a fellowship, which led to a plan for the heart of a great historic city, which was about to be implemented.

**8.10** *View from the shopping arcade at street level toward Institution Square. This intersection becomes the terminus for Route 1.*

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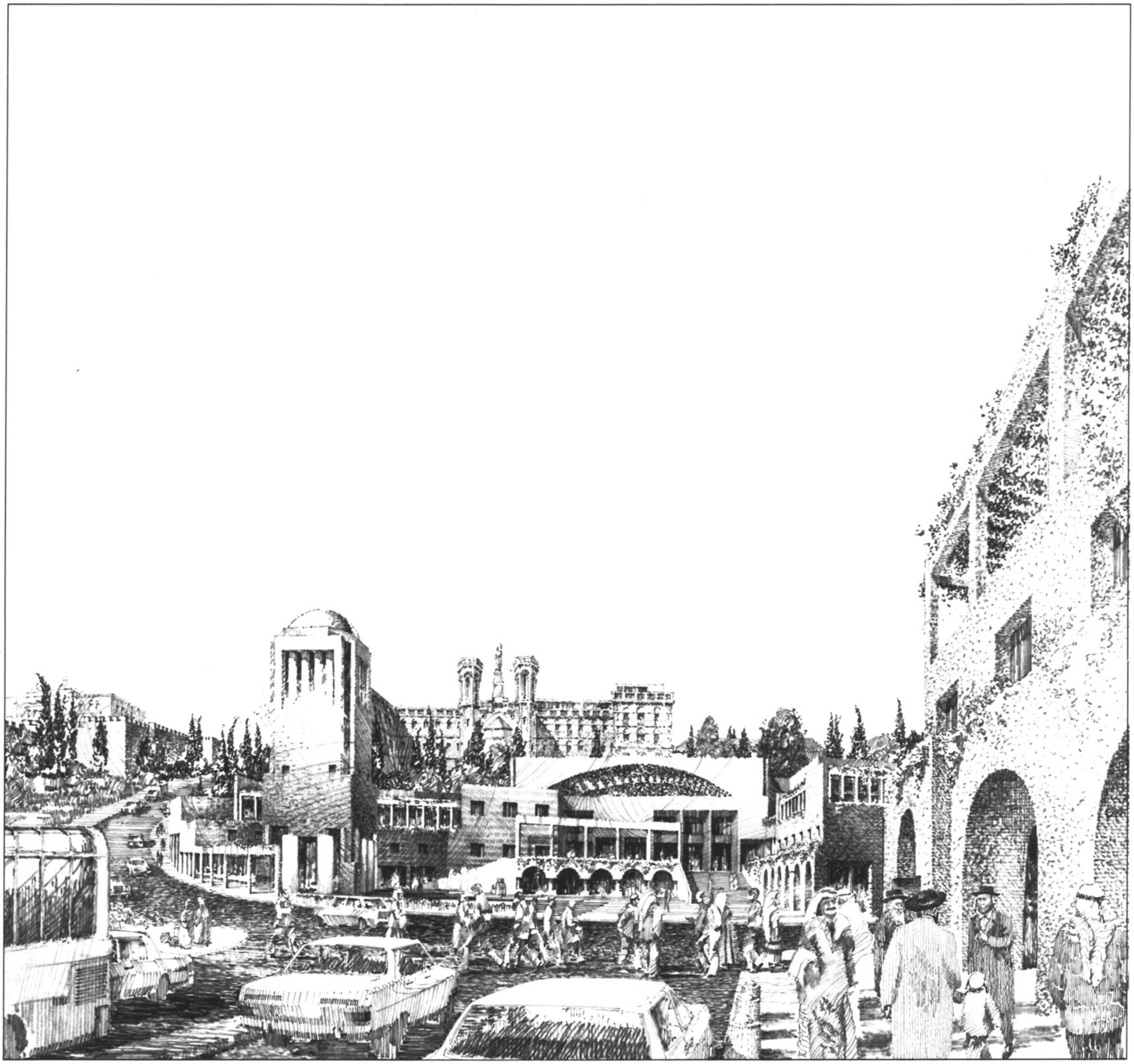

**8.11** *Route 1 is seen as a new and important entrance into Jerusalem and not as a through road. It is downgraded as it approaches the Old City. Its major importance to the plan is to feed the commercial cross-connection at the two central business districts. "The Seam Plan," as envisioned by the Fellows, calls for three major zones: a. Damascus Gate Triangle; b. the commercial cross-connector linking Jewish and Arab central business districts; c. Wadi Joz, an open recreational space with minor cross connections.*

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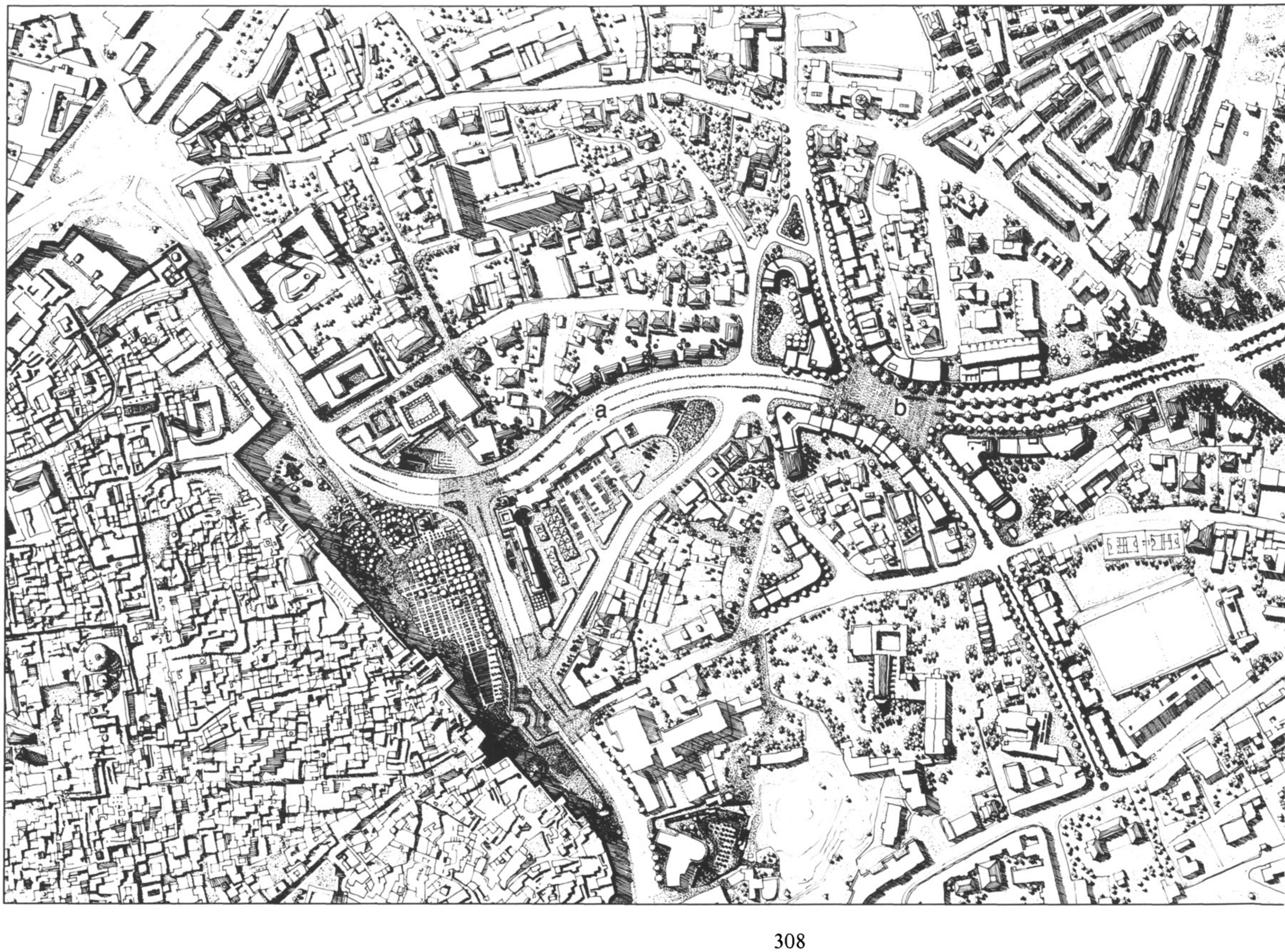

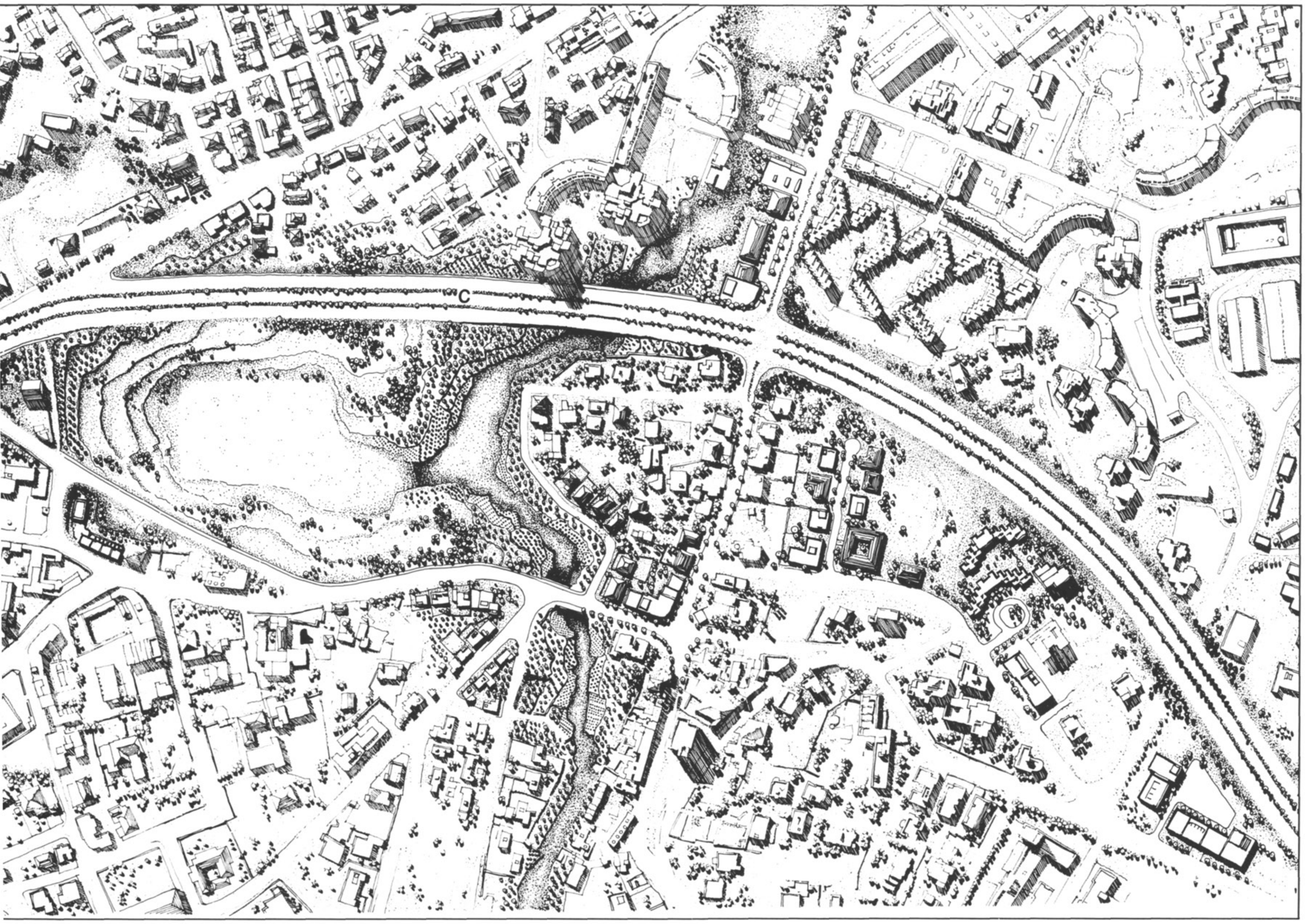
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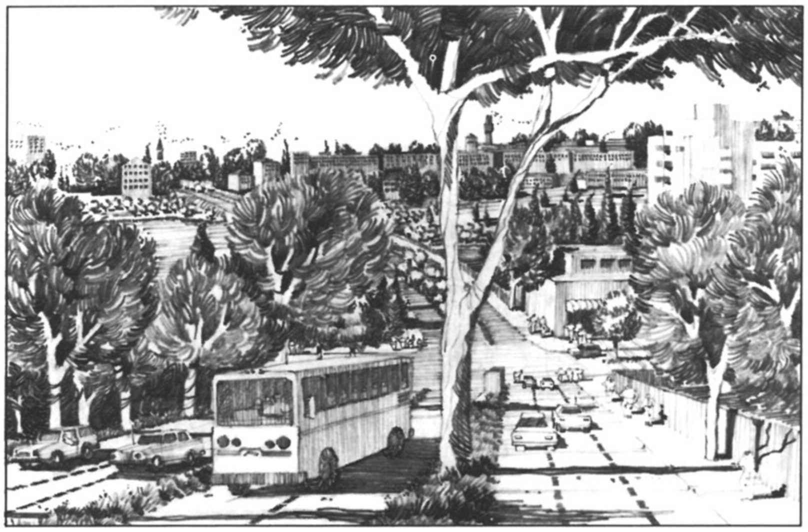

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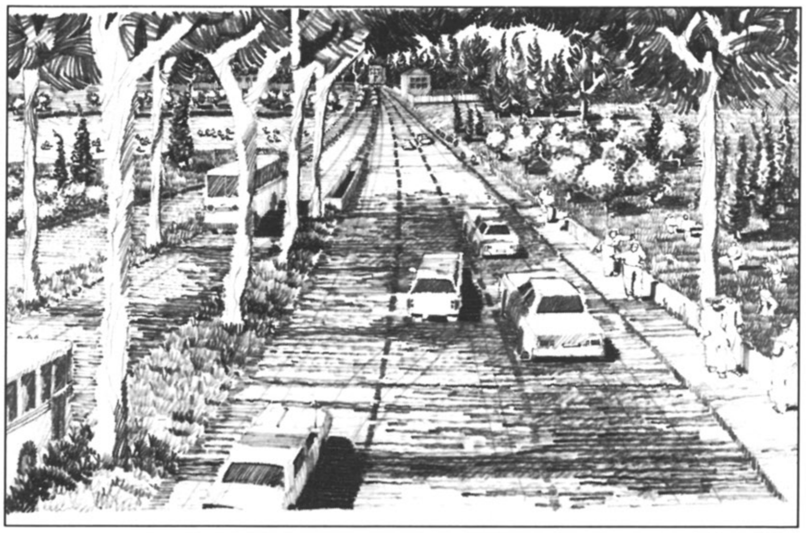

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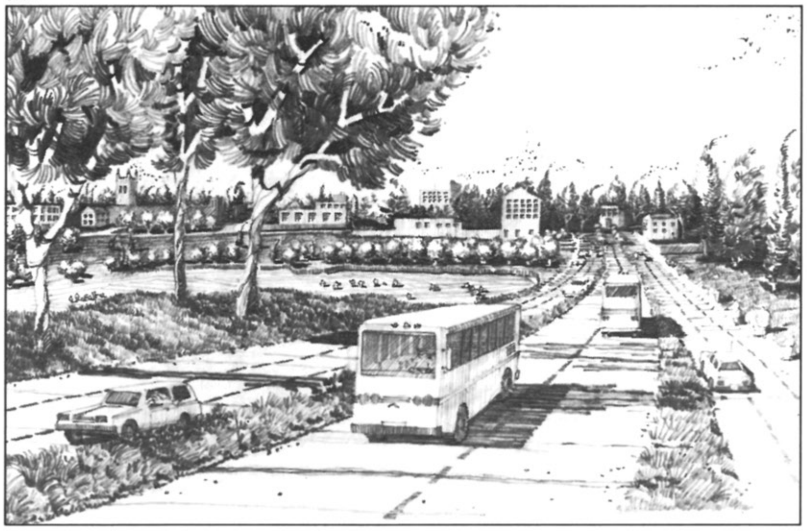

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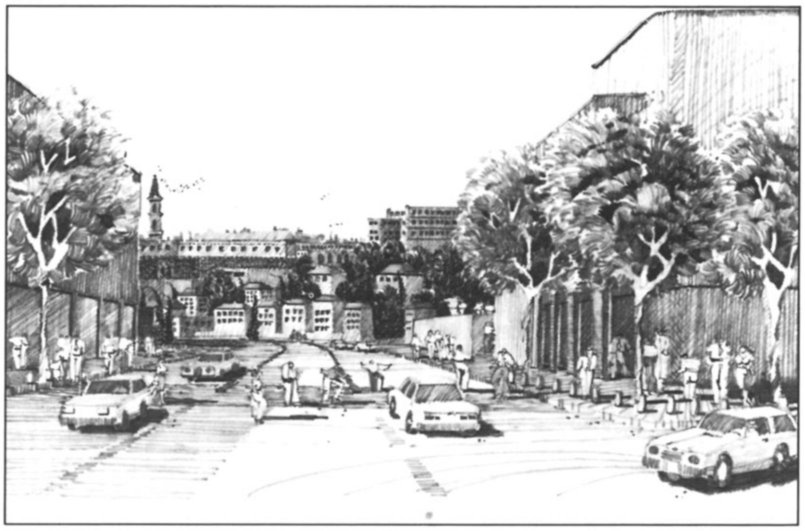

**8.12** *View from the road north of Wadi Joz.*

**8.13** *View from the road entering Wadi Joz.*

**8.14** *View from road at Wadi Joz.*

**8.15** *Major intersection at Route 1 and the commercial cross-connector between Jerusalem's two central business districts.*

**8.16** *View from the upper levels of Institution Square, overlooking the Civic Plaza, toward Damascus Gate and the Old City beyond. The shopping arcade above the bus station is seen to the left.*

**8.17** *(Overleaf) The Street of the Prophets to be retained and enhanced as a service street to the Old City markets. Most of the goods sold in the markets are stored here and taken by bearer, donkeys and pushcarts into the Old City.*

**8.18** *Re-excavation and development of new pedestrian ways at historic quarries near Damascus Gate. The new pedestrian ways help connect Damascus Gate and the new Civic Plaza to the Arab central business district.*

**8.19** *Coffee shops and restaurants on the upper levels above the shopping arcade provide views of the Old City and many of its historic monuments.*

**8.20** *Pedestrian access from the new subgrade bus station to Street of the Prophets and on toward Damascus Gate.*

**8.21** *Coffee shop and restaurant area at the entrance to the underground access to the public parking will activate the eastern edge of the new Civic Plaza.*

**8.22** *Entering the Civic Plaza via the passage from the bus station below street level. The Islamic Garden area is readily accessible and lies directly ahead.*

**8.23** *Traditional olive terraces above and to the east of Civic Plaza become a landscape. Transition from the existing National Park to the new Islamic Garden within the Civic Plaza.*

**8.24** *Major pedestrian access leads up from the bus station to the shopping arcade at street level and extends under the street as well.*

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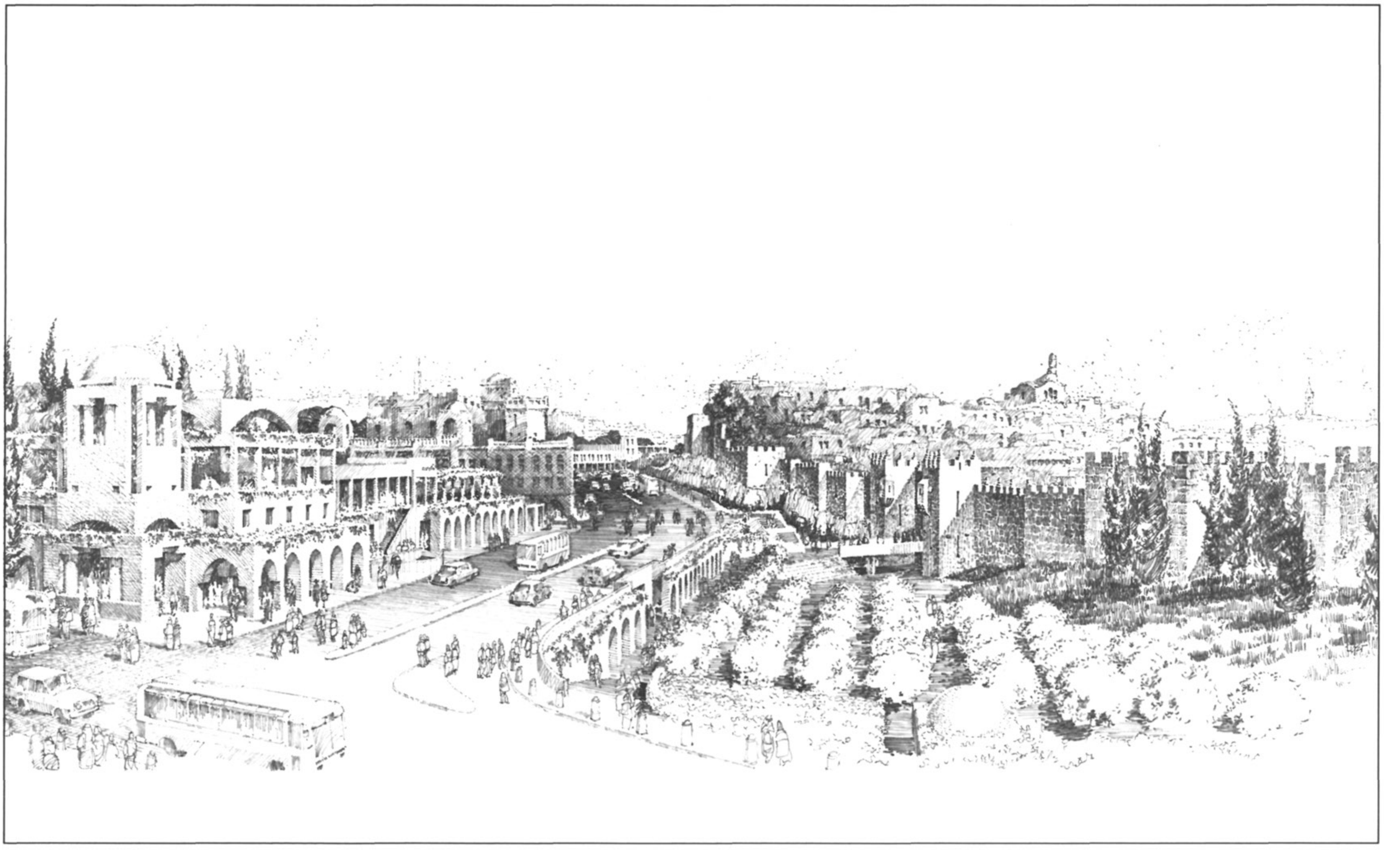

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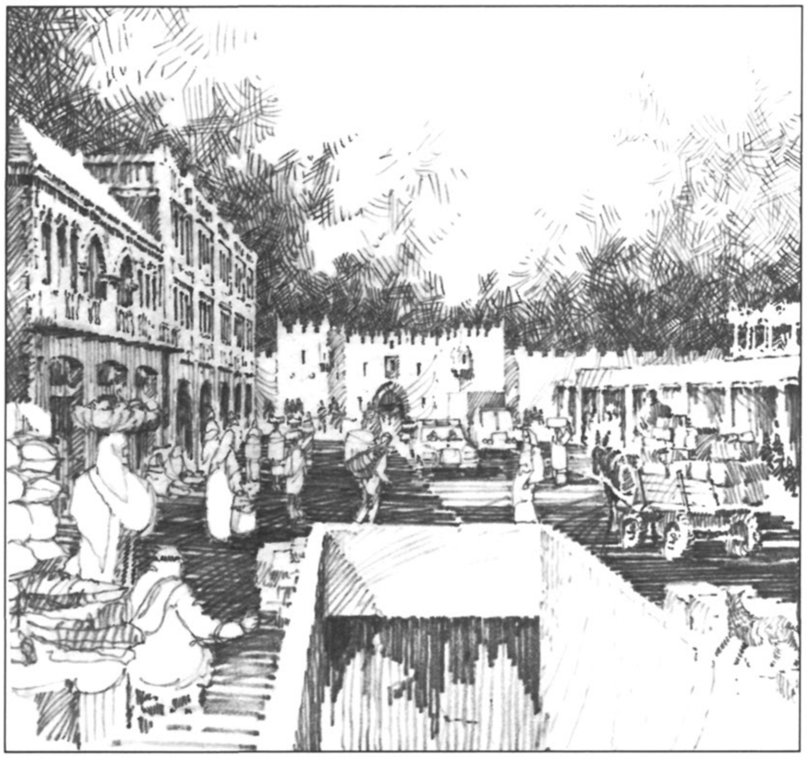

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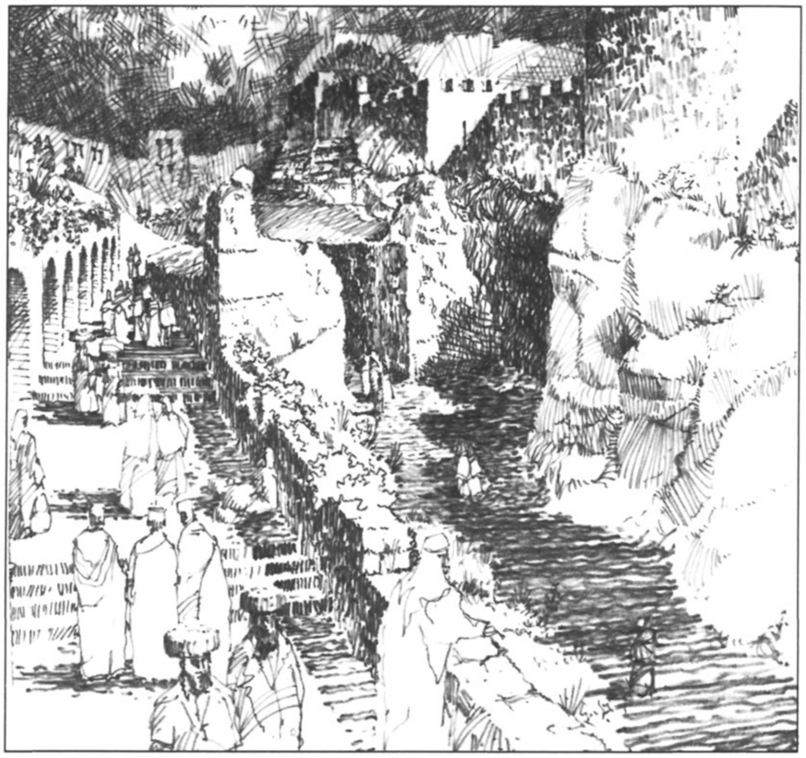

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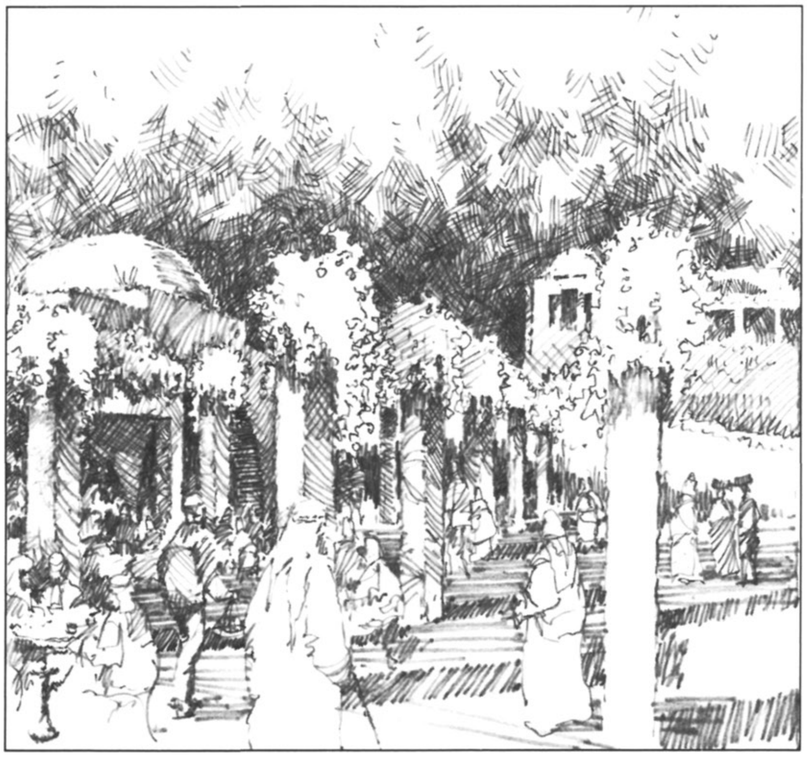

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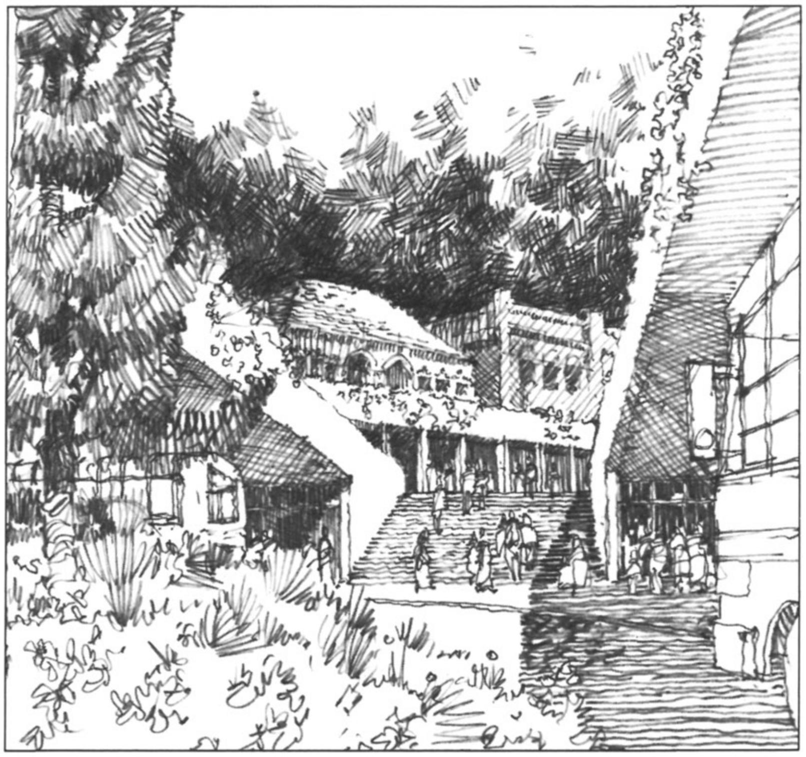

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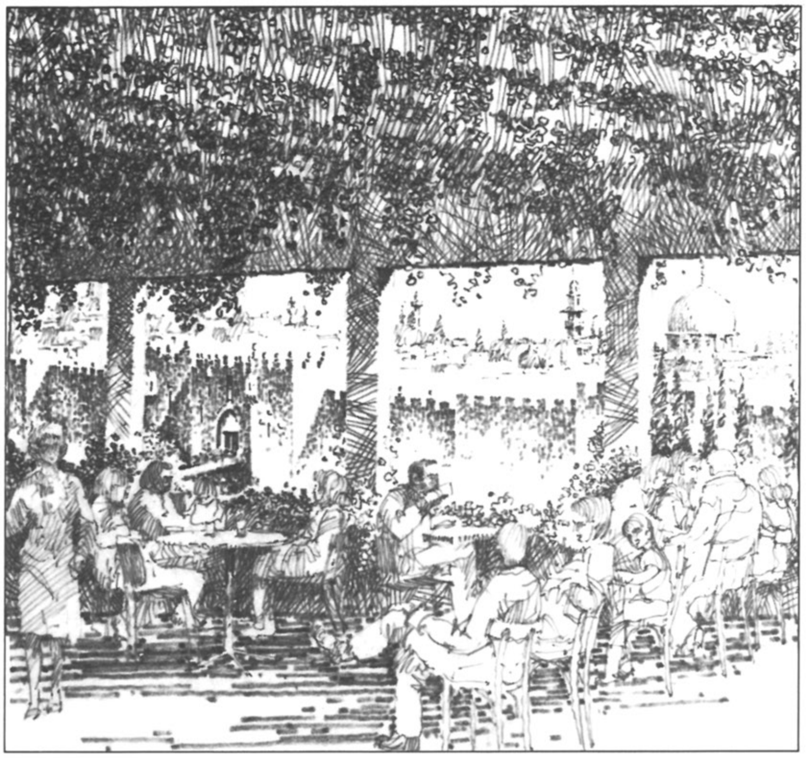

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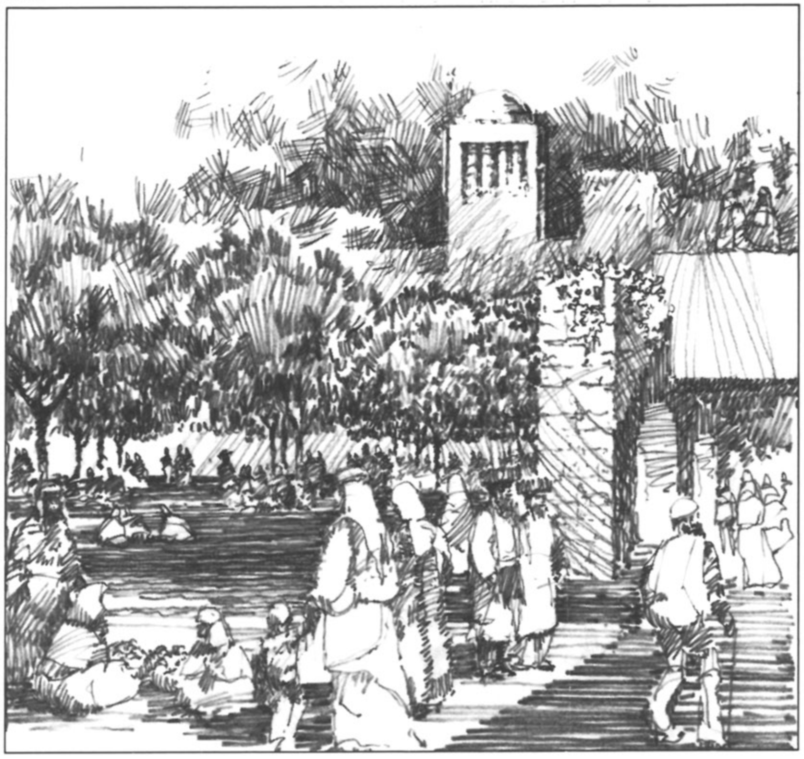

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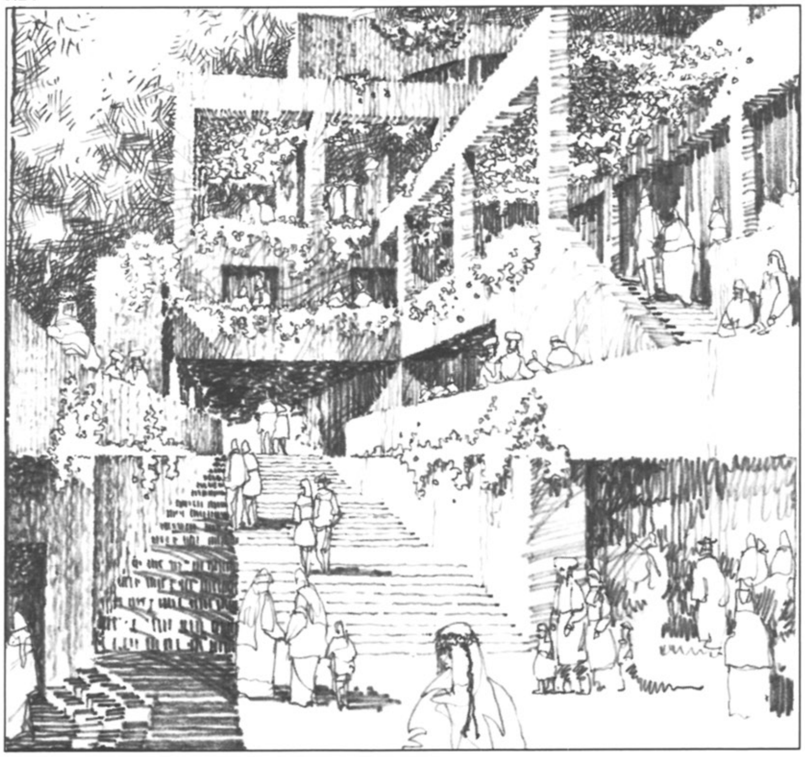

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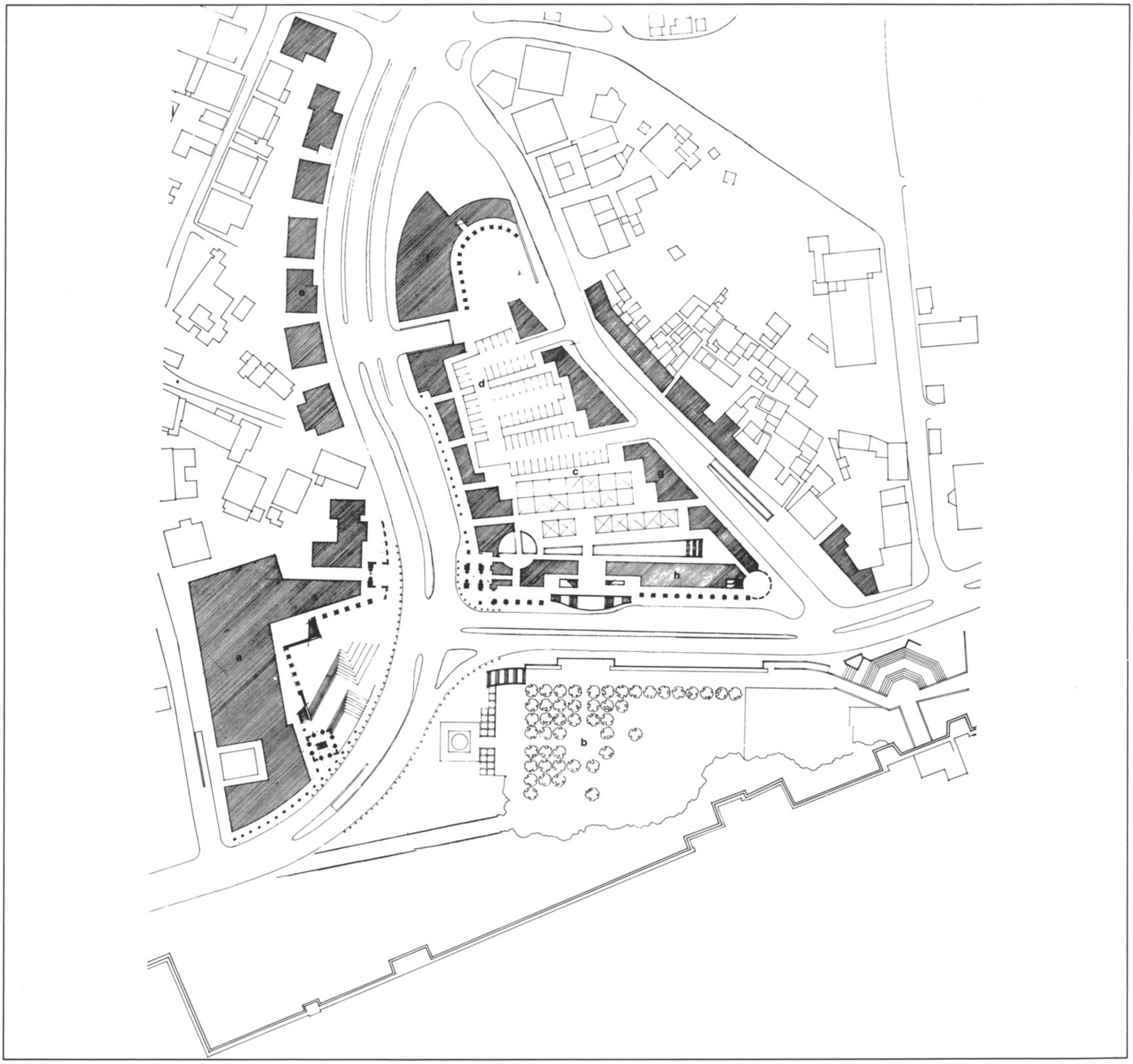

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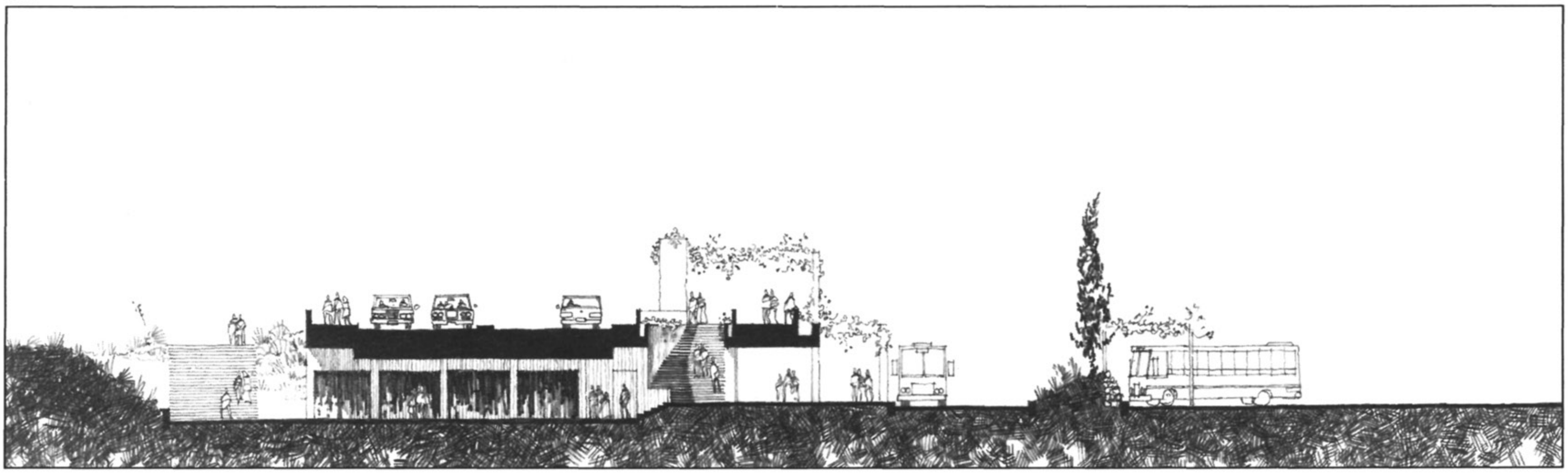

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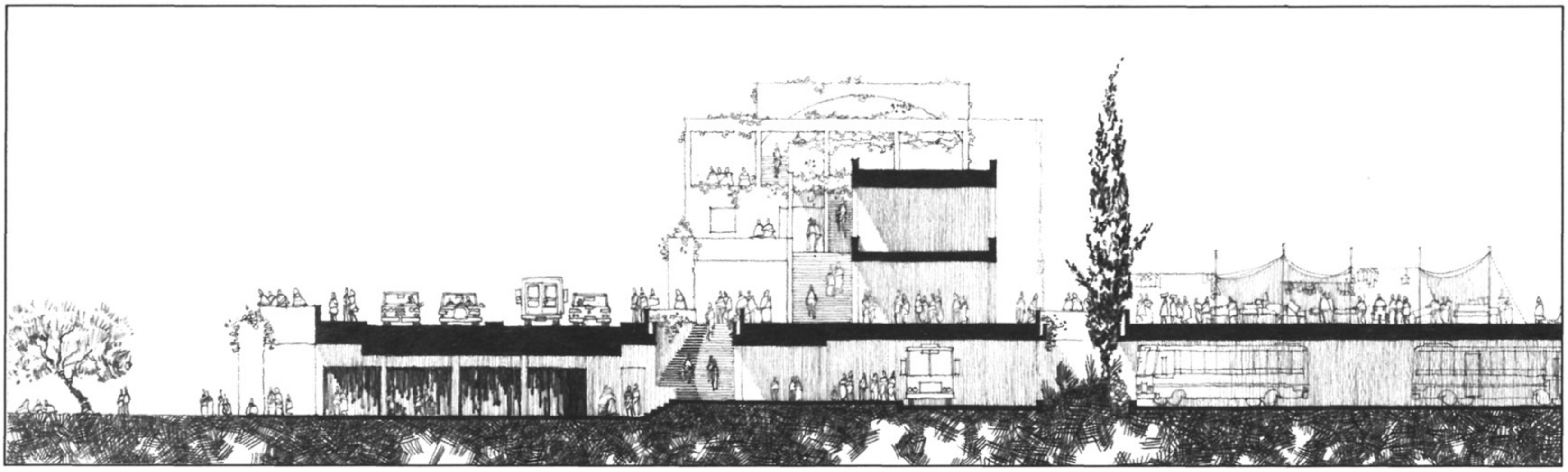

**8.25** *"Structures" Map. The hatched areas indicate new buildings or structures within the existing context: a. institutional buildings at Institution Square; b. Civic Plaza; c. day markets; d. taxi; e. infill housing at Musrarah; f. entertainment center; g. infill or rehabilitated warehousing and retail; h. shopping above active bays of the bus station.*

**8.26** *First phase – a cross section of the bus station with passageway below street level.*

**8.27** *Second phase – a cross section of the fully developed bus station with shopping arcade and taxi stations above. The passageway below street level becomes a pedestrian link to the new Civic Plaza.*

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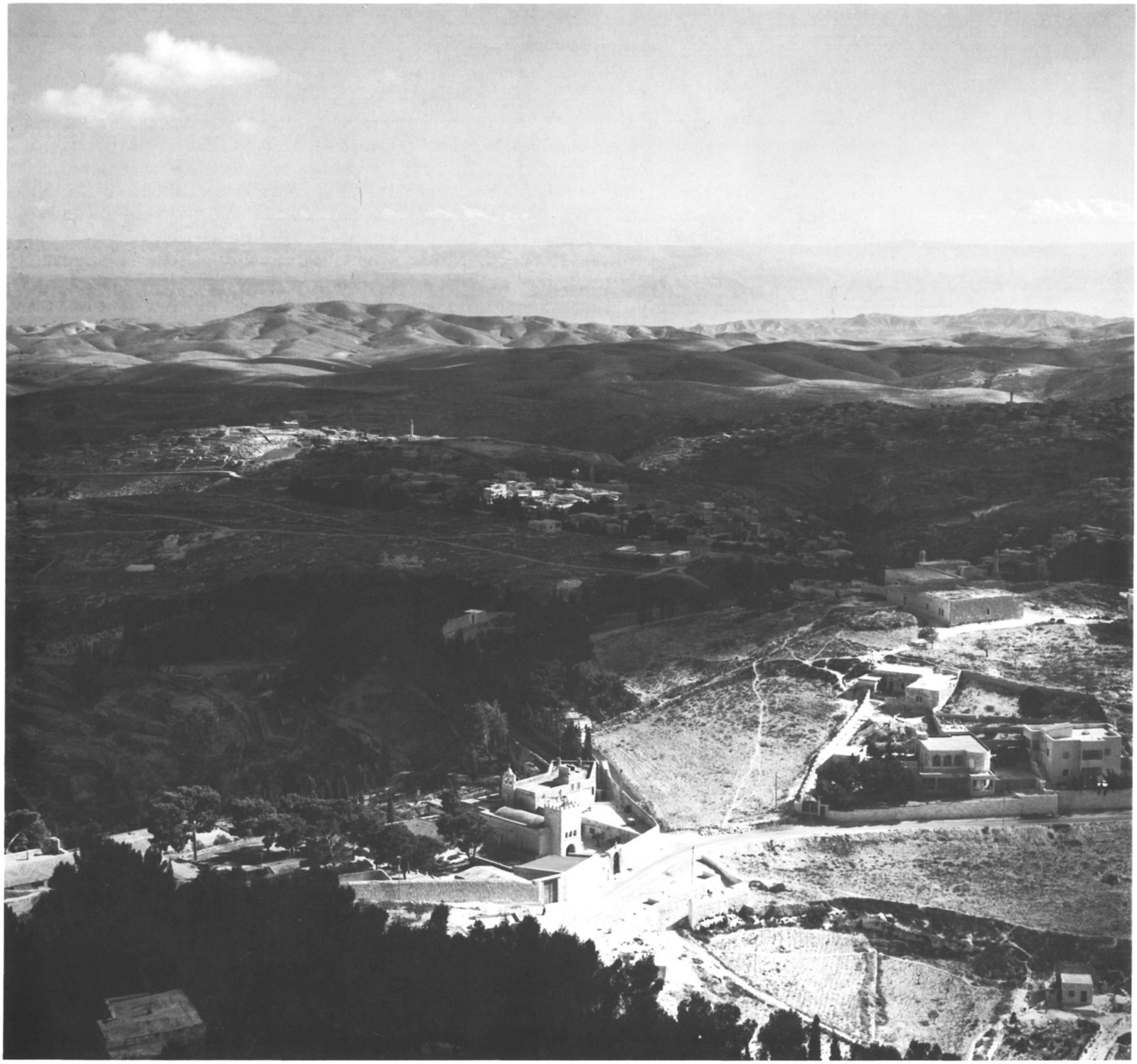

# EPILOGUE

The four-year study reaffirmed the magic of Jerusalem. Many barriers came down; separate departments within the Graduate School of Design — architects, landscape architects, urban designers — known for their lack of communication with each other, were drawn together and enthusiastically collaborated. Faculty members with assumed positions of theoretical disagreement discovered much common ground. Somehow Jerusalem brought things back to their essence; dubious constructs collapsed and preconceptions were rethought.

The greater lessons of the undertaking were sometimes obvious, sometimes surprising. Some truisms were reaffirmed: in planning an expanding city, even while acknowledging the economic and political forces, there is enormous latitude on the question of quality. We tend to think in terms of a grand vision, the great concept, but it is also true that as one travels Jerusalem's new neighborhoods, where roads too wide cut ruthlessly into the landscape, where projects set back from each other form a new kind of no-man's-land, one has a sense that attention to detail, careful reexamination of methods and standards, and plain common sense can go a long way toward making a better city.

Time and time again simple proposals made by the students were very effective: trees planted along the Bethlehem road to shield industrial development to the east; roads rerouted to respond to the topography; apartment buildings realigned, densities slightly reduced — all small gestures, with great potential impact.

To assess these studios, we must return to the questions and objectives raised five years earlier. When we embarked on the studios, we questioned whether contemporary development could be harmonious with a city of rich architectural heritage. That question was confronted in all the studios, from the project for the restoration and reconstruction of historic monuments in the Old City to the design of new communities in the suburban outskirts. Those students who considered reconstruction within the Old City walls tended to evolve an architecture close to the indigenous architecture of the city. Invariably they adopted stone construction, alluded to a load-bearing masonry structural system, and responded to the context by making the new almost indistinguishable from the old.

In the summer of 1985 a seminar to assess the studios was held in Jerusalem with the faculty and several guests from around the world. Many of the participants were critical of the students' reluctance to explore a contemporary syntax and to use contemporary technology and construction modes in the historic city. Oreal Bohigas spoke of the "courage to demolish when it is appropriate" and of the need to resist subjugating the new to the old. In contrast, some of the Jerusalem participants accepted the students' conservatism.

The question became more complex as the studies extended to the periphery of the Old City — the places where the Old City meets the new, where zones of vehicular traffic collide with pedestrian precincts. Here the students' proposals for Damascus Gate and the Russian compound were more diverse. In some schemes biblical landscapes would camouflage buildings; others proposed intensely developed mixed-use megabuildings. But determining whether what they proposed as new development is compatible with the old is considerably more complex than with reconstruction and preservation. It becomes clear that in searching for a mode of development that accords with the spirit of Jerusalem, the students resorted to measures that tended to contradict prevailing development patterns and market forces.

**8.28** *View of Jerusalem from the Mount of Olives. In the background the Judean Desert.*

For example, they invariably proposed extensive underground parking to both meet demand and avoid an urban setting dominated by the storage of automobiles. They proposed major investment in infrastructure to accommodate bus terminals and service depots, in response to the needs of the pedestrian precincts of the Old City and to preserve the atmosphere and scale of the Old City and its bazaar. They assumed a central development authority for assembling large parcels of land in their attempts to achieve a cohesive development and overcome the prevailing piecemeal development. They often proposed developments of relatively low land utilization, devoting a major portion of available land to open spaces, parks and gardens, and non-income-producing institutions. They proposed projects with great urban spaces, like piazzas and arcades, requiring a high level of architectural control over major sections of the city.

Each of these strategies contradicted prevailing patterns: in Jerusalem development patterns and market forces have tended to follow the line of least resistance. Thus parking needs are *in reality* resolved by unsightly parking areas in the Mamilla, Dung, Damascus, and St. Stephen's gate areas. Automobiles increasingly penetrate the Old City. Buses, trucking, and services are accommodated in open areas with minimal shelters and sheds. Everywhere one can see the reluctance to invest in infrastructure, due to the shortage of funds and other priorities. Similarly, projects requiring comprehensive planning and controls give way to endless public debates, an absence of consensus, and the lack of an authority prepared to proceed in the face of public opposition by the central government (with the one exception of the politically motivated new neighborhoods in the outskirts). Projects calling for a lower density and the appropriation of public land for open space are opposed by the land authority, which demands and fights for high-density utilization of its land with a vigor equal to the most aggressive of New York developers.

Thus the answer to the question "Is it possible to create a modern development compatible with the old in Jerusalem?" is clear. If one gives in to prevailing development patterns, public policies, market forces, the answer is *negative*. The development will necessarily be incompatible and discordant. Prevailing patterns must be changed if the objectives of harmony and continuity are to be achieved. The land authority must be prepared to zone down its land. Greater investment in infrastructure by the municipal and government authorities is required. There must be a higher level of urban design, and an implementing authority capable of dealing effectively with a public-participation process is essential. Without such changes almost every one of the proposals made by the students would remain a paper dream. Similarly, the possible solutions offered in verbal descriptions by faculty and guests would remain unattainable. Pursuit of the line of least resistance will not achieve a modern city harmonious with the old.

The problem becomes even more complex on the scale of the metropolitan region. Invariably the students' proposals echo the conventional wisdom. Proposals for new sectors at the outskirts recall the approach taken by architects developing virgin land into new neighborhoods. Many of the proposals adopt traditional urban patterns. In the theoretical work in the field of urban design this approach is exemplified in proposals by Leon and Robert Krier. The traditional street and square are the basis for the shaping of urban space, formed by the traditional three- and four- story apartment block built to the street line and with internal courtyards. The pre-automobile, nineteenth-century urban patterns are reproduced with little acknowledgment of contemporary conditions. The student proposals in this mode would create humane and charming environments that might be neither feasible nor workable under the conditions of contemporary life they must sustain.

A second group of proposals radically departed from the traditional patterns. These tended to resemble what was actually built in the new neighborhoods of Jerusalem. The new forms abandon the traditional square and street in favor of large-scale structures, separation of vehicular and pedestrian traffic, and large parking solutions. The results are often unsatisfactory, as in the case of the new neighborhoods, and lack the cohesiveness that we associate with "neighborhood." The issues of territoriality, orientation, linkage, and mixed uses are dealt with less satisfactorily than in the traditional neighborhoods, while the proposals more effectively respond to the requirements of efficient traffic, parking, and services. What can be said of such proposals is that they are not compatible with traditional Jerusalem.

Assembling the numerous proposals for the various parts of the city into a master plan or an overall strategy for the city's development was never our intention. But the mere fact that the proposals covered almost the entire region does raise questions about the methodology and validity of the "grand plan." For what the student studies indicate is that attention to detail, care, and careful study can improve the mode of development. Nowhere is this more obvious than in the manner in which roads are constructed and development sites defined in Jerusalem's complex topography. Carelessly done, the results are often devastating cuts and fills in the landscape, great dams of earth embankments, deep cuts into the bedrock, buildings raised high above retaining walls or sunk deep into excavated pits. With three-dimensional modeling, cut-and-fill sections, and testing against real models, most of these shortcomings can be overcome.

While it is clear that devising better methods would result in immense improvements in the quality of the new neighborhoods, it is equally clear that that is not enough. Care and attention to detail will improve the micro-scale but will not deal with the questions of the macro-scale, the image structure, and organization of the entire metropolitan region. For assembling of all the students' projects into a single document — a total regional plan — would still result in an essentially structureless mosaic. The regional studies did result in some proposals for green belts, an edge to the city, and a network of open spaces and parks penetrating the urbanized areas. But beyond that, they failed to come forward with a strategy that would make the whole more cohesive and effectively connected. The mosaic of all the plans, in fact, raises the question as to whether, at the regional scale, assembling many separate planning interventions is the appropriate mode of development for a pluralistic society.

It is, however, both appropriate and possible to superimpose a greater scale, the grand plan. That such visions historically resulted in some of the most spectacular cities is a matter of record. Whether such methodology is either desirable or feasible today remains the open question. No studio during the five-year studies was asked to address this issue directly, and none of the participating faculty took a position on the question either. Some, by intuition, shied away from the notion of the grand gesture, reflecting intuitively the almost certain impossibility of implementation given the social and political realities. But they did not adopt this attitude with conviction, judging it the optimal and appropriate strategy. On this question the studies remain totally inconclusive, demonstrating neither the effectiveness of a grand plan nor the validity or superiority of the strategy of planning by small-scale, decentralized, and local decisions.

In Jerusalem two grand planners operate: the highway planners, who align their expressways on hilltops and valleys, and the political planners, who scatter neighborhoods in the landscape with the ease of placing pins on a map. Neither has given the city the vision and order appropriate for a city for half a million people.

Nowhere is this deficiency more obvious than in the question of a divided versus united city. All in Jerusalem, certainly on the Israeli side, proclaim the desire for a perpetually united city. Every policy and strategy is conceived with this objective in mind. Yet analysis of these policies in the studio revealed that the notion of the united city was in fact not a positive, affirmative objective but a negative, defensive vision, a preventive strategy to keep the city from being divided. There is a world of a difference between a strategy aimed at preventing division and one aimed at achieving unity. The subtle but fundamental difference has escaped many, even within the municipal government itself: a united city, while it might be made up of many homogeneous and heterogeneous neighborhoods, functions as one — sharing its great institutions, transportation networks, and great meeting, business, and market places — while the indivisible city can remain the assemblage of separate cities that cannot practically be divided by political borders. If the studios did not come up with a comprehensive strategy for a unified city, they certainly succeeded in exposing the differences between the negative and positive aspects of planning for a united city.

They also reopen the basic questions. What do the people of Jerusalem mean when they speak of the "united city"? What do they mean when the speak of its indivisibility? Do they mean political control? Do they mean co-existence? Do they mean truly *living together?* Do they want two transportation systems, one for Arab, one for Jew? two business districts? separate road systems, all jumbled up in a way that no border could traverse? Or, alternately, do they want to move toward a city that serves all its residents, where Arabs and Jews shop in the same places, use the same buses, play in the same parks, and even, in some places, live in the same neighborhoods? Is the prevention of a divided city to be a *physical constraint* or a *social and economic reality?* Often we found ourselves thinking of a new kind of life, new partnerships, only to face skeptical reactions from both Arabs and Israelis.

This brings us full circle to the issue of the old and the new and the relationship between them. Underlying the assumption that the new and the old are destined to conflict and contrast, that the new destroys the old, erases memory and heritage, is the prevailing *laissez-faire* attitude that we are not masters of the greater forces that shape our lives, that we cannot but accept the social, cultural, and economic forces as they act upon society at the moment at which we join the process. The opposite attitude, one that permits speculation on other ways and other values, other arrangements and relationships, one immersed in the old-fashioned utopian vision of a better world, does not lead to greater contrast and discord with the past, but suggests an integration, a harmony, a continuity, a sense that past and future belong together in the present.

# NOTES

## INTRODUCTION

1. The city engineer is the highest appointed planning officer and is responsible for both ongoing planning activities and administration of building licenses and permits. The position was established by the British Mandate Planning Law of 1922 and reinstated in the Israeli Planning and Building Law of 1965 (see below), which substantially continued the system established by the British. The position has often been filled by an engineer, though for the duration of these studies, the city engineer was Amnon Niv, an architect based in Tel Aviv.

Under the Planning and Building Law of 1965, planning is administered at three levels: local building and planning commissions, district building and planning commissions, and the National Planning Council.

Each local building and planning commission carries out the day-to-day work. The commission has responsibility for regulating the construction and demolition of buildings; laying out streets; enforcing planning and building laws, ordinances, bylaws, and rules within its boundaries; considering all applications for building permits and collecting fees payable thereof; providing the district commission with information about the conditions and needs of the local planning area and the probable direction and nature of its development; and preparing and proposing schemes to the district commission.

At the intermediate level are the district building and planning commissions (there are six administrative districts, for each of which a commission is appointed), which are responsible for the execution and implementation of the law and policy in planning matters. Their responsibilities include constituting the town planning area; confirming bylaw regulations, town planning schemes, and detailed town planning schemes; controlling town and country planning within their district; and coordinating the activities of the various local commissions within their jurisdiction.

The Building and Planning Law created a new authority, the National Planning Council. The law defined its responsibilities as advising the government in the implementation of planning legislation; reviewing planning matters of significance to the country as a whole; preparing an outline planning scheme for the whole state; and performing appellate functions in regard to decisions of the district commissions.

The law also enables the establishment of special commissions to undertake the functions of both district and local commissions and enables the cooperation of two or more local district commissions in order to realize planning matters of mutual concern.

The Supreme Court, sitting as a High Court of Justice, is empowered to order state and local authorities and their officials to do or refrain from doing any act in the lawful exercise of their function. Although the court will not review the planning aspects of a decision taken by a planning institution or interfere with the valid exercise of the latter's authority, it has repeatedly held that planning bodies must fairly and reasonably exercise the powers vested in them. Application to the High Court of Justice by persons aggrieved by the decisions and actions of the planning authorities are quite frequent, and in this manner a body of town planning case law has been slowly developing.

## CHAPTER 1

1. For a full discussion of the events leading to the annexation and the considerations relating to the definition of the metropolitan area, see Meron Benveniste, *Jerusalem: The Torn City*, Isratypeset Ltd., pp. 95–138.

## CHAPTER 3

1. . There are interesting precedents for both approaches. The colonnade as a unifying element was proposed in the Robertson and Lewin–Davis plan for Shahestan Pahlavi in Tehran. This great square, proposed as the central civic place for Tehran, was to equal the Maidan of Isphahan in size. Individual buildings, including the city hall, the central library, and government ministries, were to be connected by a colonnade designed by Robertson. There are several examples in Israel, some dating back to the British mandate. Kingsway in Haifa (now Independence Boulevard) was constructed with a single building elevation along its entire length. On Iban Gvirol Boulevard in Tel Aviv, an arcade was required on the ground floor of all buildings. In Dizengoff Square in Tel Aviv, curved facades with horizontal galleries were designated; more recently, in the Kikar Hamedina in northern Tel Aviv, designed by Oscar Neimeyer, all developers were required to construct a repetitive building design around a 280-meter-wide circular piazza.

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